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The European Commission

Directorate General X

FINAL REPORT:

PARENTAL CONTROL OF TELEVISION BROADCASTING

by University of Oxford, PCMLP

Study carried out by the European Commission as required by Article 22b of Directive 97/36/EC of 30 June 1997 amending Directive 89/552/EEC (Television without Frontiers Directive).

- Executive Summary (html)
- Full text in PDF format:

This study is also related to the Protection of Minors and Human Dignity.

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EXECUTIVE SUMMARY: Issues, Analysis and Recommendations

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The Directorate General X of the European Commission has requested a study of the techniques and technologies available to facilitate parental choice, addressing specifically the television environment. This is prompted by the interest, at European level, in parental choice devices of the kind that have been adopted elsewhere in the world, especially the United States and Canada. This study only encompasses choice mechanisms to protect children from harmful content; it does not consider approaches to *illegal* content. As several EU documents have outlined, it is necessary to differentiate between these categories of content. They represent different issues of principle, and call for very different legal and technological responses. Furthermore, as the study also shows, what is considered to be harmful depends on cultural differences and can be distinct according to different age groups. All this has to be taken into account in defining appropriate approaches to protect children against undesired material whilst ensuring freedom of expression.

A significant public interest lies in protecting children from viewing excessive television violence and other programming that may produce harmful effects.

Children are presumed, quite justifiably, to be different from adults, to be more vulnerable, less able to apply critical judgmental standards, and more at risk. Ordinarily, society depends on parental supervision to protect children, but there are elements of the current system that have limited the scope of such supervision. The time in which the family as a single unit watches programming together has declined, and this process will be accentuated in a multi-channel, multi-set digital era. This decline has occurred as the vast outpouring of transnational channels has made it more difficult for regulatory authorities to monitor the way companies comply with programming standards based upon cultural sensitivities. New forms of technology have also increasingly upset established patterns of parental choice.

It is in this context that there has been a search for ways of enhancing parental choice and discovering new ways of governing, based upon a partnership between industry, social groups and government, to accomplish that goal. The importance is clear of Europe-wide action that is cost-effective, administratively viable, capable of general adoption and one which empowers parents. This Study ranks and recommends approaches that can be taken at the European level to accomplish these goals.

The very definition of enhanced parental choice is somewhat difficult. Partly, it is a matter of ensuring that parents or guardians have adequate information, in a manner efficient to obtain and use, to exercise the authority that is vested in them. However, the key element for most policy discussions is how to empower parents when they cannot be with their children. The goal, for the purposes of this study, is to increase the power and capacity of a parent (or guardian) to control what is on the television set particularly *when the parent is not present or able to monitor the content consumed.* That is why the international emphasis has been on blocking technologies or other techniques to make proxy decisions relating to programming.

Fears exist that these blocking technologies would become "upstream censoring" techniques, violating freedom of expression rights as safeguarded in the relevant International Treaties and constitutions of the Member States. Nonetheless, in the specific case of parental choice it must be noted that this argument is not so relevant; the decision to not receive the information is decided directly by the potential end user and not by an intermediary. This is not to say, however, that blocking regimes may not adversely effect the likelihood of financing for some programming based on concerns that some types of content are more susceptible to being blocked from potential audiences.

Others argue that the right of children to receive information may be curtailed when introducing these mechanisms. It is therefore clear that, as with all other public policy decisions in the field of communications, a balance has to be found between rights and responsibilities of the media industry, as well as between the empowerment of parents to protect their children and the protection of children as individuals with the right to receive information and entertainment.

Finally, the project of enhancing parental choice must be dealt with in terms of existing measures, such as watersheds, icons and acoustical warnings. Technical devices to enhance parental choice may have drawbacks, which require the continuation of social safety net measures: measures that protect children in those instances where parents cannot or will not exercise sufficient responsibility to protect their children. As a significant number of commentaries have noted, broadcaster responsibility cannot be abandoned because of the possibility, in a relatively weak and inconclusive form, of mechanisms that improve the capacity for parental supervision.

1. General conclusions

1. In the current analogue system, the US and Canadian approach is not technically feasible in Europe. Moreover, analogue technologies available in Europe are cumbersome, unlikely to become fully operational in all regions within a reasonable period, subject to circumvention, and likely to be rendered obsolete by emerging technologies.

2. At present, technical measures alone should not be considered to be able to achieve compliance with Article 22 of the *Television Without Frontiers Directive*. that is, to "ensure that minors in the area of transmission would not normally hear or see broadcasts" that would be "likely to impair their physical, mental or moral development."

3. Rather than focus on the V-chip, as it is being implemented in the US and Canada, regulatory approaches in Europe should be directed at the opportunities and challenges of the digital environment. Digital technology allows for the operation of technical devices which offer a much higher level of protection.

4. Nonetheless, during a transition period, there are specific efforts in the current, predominantly analogue setting that may be advanced to provide useful, albeit imperfect, technical devices. The use of electronic programme guides (EPGs) and the proliferation of an open technical standard for receiving analogue EPG signals by new analogue sets and set-top boxes should be strongly encouraged.

5. Our recommendations for parental choice schemes in a digital age favour a model of parental choice in which:

- a monopoly rating source is less dominant and pluralism in rating agencies and techniques is fostered, and

- *parental selection* of desirable programme content criteria mobilises available analogue and digital technologies.

1. Descriptive ratings, as a rule, should be preferred over evaluative ratings. Descriptive ratings delegate to parents, guardians and minors a greater ability to assess programmes for themselves. Descriptive ratings are also better equipped to overcome cultural differences.

2. No foreseeable rating or labelling system is a total substitute for broadcaster responsibility. Broadcaster responsibility standards must be sustained at present levels.

3. Consistent with both transitional and long-range approaches, more emphasis must be placed on media literacy education and critical approaches to television viewing by parents and children alike.

4.

2. Problems with the V-chip model

Our study of the US and Canadian approach demonstrates major technological differences between analogue broadcasting transmission in Europe and in North

America. These differences make adaptation of the specific V-chip technology adopted there all but impossible.

Technical devices that empower parents have two primary qualities: they depend on a stream of information about given programmes, which accompanies it to the receiver, and by which the parent can control in advance which programmes are to be blocked or watched.

The North American scheme depends on the availability of line 21, field 2 of the Vertical Blanking Interval (VBI), a space that has long been reserved there for closed captioning and is thus available for the transmission of programme-related labelling information. No Member State has a similar requirement and, in fact, in no Member State is there available Vertical Blanking Interval capacity to transmit such data.

While use of the Teletext band and the possibilities provided by set-top box gateways may provide workable European alternatives to the North American approach, the majority of alternative technological methods for use in the European analogue environment have substantial design flaws and may require years to introduce them widely. These limitations preclude a decreased reliance on other techniques such as content regulation and watersheds.

Furthermore, the US approach and its Canadian counterpart presuppose a dominant labelling scheme, with relatively uniform icons, so as to simplify the process for the parent. While there is much to be said for this uniform scheme, it is inconsistent with the varied practices of Member States and reduces the opportunity for cultural differences and for pluralistic approaches to the way in which media are used in the shaping of families.

One of the problems of the V-chip design is that it is not impregnable to tampering. A UK Joint Working Party concluded that "in order to make the blocking kit comprehensible to adults, researchers have repeatedly produced systems that children can understand and outwit within a very short time." Another technical difficulty is the dependence on an uncertain software package in which problems will be solved; but solutions will probably yield additional problems. As the Working Party pointed out, "at one point in the Canadian trials, the V-chip blocked out national hockey games and left some inappropriate films unscrambled."

The introduction of digital terrestrial, satellite and cable television is being actively encouraged by industry and government. The pace of this development will render a focus on analogue technology not entirely practical. Even in the US and Canada, which is more suited to the technology, it will take many years for it to become standard. American research has shown that while nearly two-thirds of parents say they would use the V-chip to block inappropriate programmes, the take up of new television sets containing the device is much less popular as an option. In Europe, households replace their television sets on an average of once every 10 years and older sets are typically passed down to children for use in their bedrooms. As the above-mentioned study in the UK put it: "more than 60 percent of 10 to 16 year olds now have televisions in their bedrooms. Children whose viewing is unsupervised, or whose families cannot afford the latest technology, will be put at risk if, with the excuse of the V-chip behind them, broadcasters are encouraged to relax the standards on which we currently rely. The V-chip would therefore be an inadequate 'quick-fix' solution which would not protect the most vulnerable viewers." However, the same rationale applies also for the introduction of digital television sets. As a result the Study recommends no relaxation of broadcaster accountability and standards within an analogue setting.

If the transition from black and white television to colour sets is any indication, this analogue legacy may last a generation. This legacy thus requires the facilitation of analogue-compatible technical and rating systems in Europe during the digital transition. While the limitations of VBI-based devices particularly and video band devices generally render V-chip type systems ill advised in the European technical context, Teletext-based devices may provide a workable modality for analogue televisions. The use of analogue televisions will continue for many years in the form of legacy sets remaining in households as well as new analogue models that introduce technologies such as NexTView EPGs to European homes. Further, the pervasiveness of set-top boxes as a necessary intermediary for signal reception may also enable the use of analogue devices during the transition period to digital. Satellite, cable, and subscription services have used set-top boxes for years, and the highly successful EPGs, both in North America and Europe, have used these interfaces to store parallel databases of programming related information. The market penetration of these set-top interfaces is not likely to abate, thereby providing a strong opportunity for deploying effective blocking and filtering technologies within this modality. The primary shortcoming of this strategy lies in the fact that set-top boxes, by and large, are proprietary systems that receive non-standardised signals. Thus, the standardisation of signals dedicated to programming related information would be needed to effectively deploy, via set-top boxes and new analogue sets, analogue-based technical and rating systems at European level.

All this is not to say that the V-chip experiences fail to provide lessons. North American labelling schemes are the product of a system of self-regulation, but it is worth examining whether the nature of the specific self-regulatory approaches, particularly in the US, led to outcomes inconsistent with European objectives. In Canada, the V-chip system evolved from a multi-year process involving the regulatory body and a consortium of organisations. In the US, the process was co-ordinated, if not dominated, by one organisation, the Motion Picture Association of America. The outcome of the US model may be greater cynicism and a lower degree of performance, in terms of the overall goals of the system, than in the Canadian case. It cannot yet be concluded if the differences in processes led to meaningful differences in outcome. Furthermore, factors such as differences in the nature of media literacy support will make it difficult to arrive at a conclusion.

The technical inapplicability and the institutional shortcomings of the North American system, coupled with the increasing move to digital broadcasting, cause us to reject the V-chip as a meaningful option for Europe. However, elements of the North American experience, including the further development of labelling systems and co-ordinated icons, provide useful models. These analogue models can be improved for the European context and integrated into an over-arching, forward-looking approach to the improved technical and programming information capacities to be found in the digital future.

3. Looking to a Digital Future

Given the current focus in Europe (and elsewhere) on the introduction of digital television, the Study recommends that the Commission and the Parliament encourage parental choice mechanisms for the new digital age. Digital television, however delivered, offers greater flexibility in the design of parental empowering techniques. In this context, more room for third party or multiple rating systems is possible. In the context of an enormous increase in volume of material produced, having government (or major industry) representatives define what exactly should be the subject of ratings or labelling and how they should be

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delivered has raised significant concerns.

The nature of the regulatory or governmental function shifts in a digital era. While a major question in the analogue system is determining whether there is any usable technical device, as the Study shows in Chapter 2, the actual technical issues of providing information and linking it to a filtering or blocking mechanism at the receiver end is less complex, mechanically, when the switch to digital occurs. The problem is not technique, but structure. For example, a supplier of programming that provides a set-top box may serve not only as the gatekeeper for programming, but for rating information as well. If the goal is to allow many rating systems to have access to the consumer, then the regulator will have to ensure that a non-discriminatory flow of alternative programme descriptions and alternative and pluralistic ways of filtering and screening are encouraged. The analogue rating schemes, especially the United States and the Canadian V-chip model, virtually demand a monopoly provider. Digital approaches, on the other hand, offering the possibility of pluralistic ratings, undermine this monopoly.

Several types of rating providers may emerge. They may act in a competitive or complementary fashion. Broadcasters are likely to retain the rating function but it is also possible that, at the beginning of the chain, content producers will rate their content themselves on the grounds of criteria designed by one or several neutral bodies. This last response would overcome the problem of programming volume but would also require a possibly undesirable level of producer control. From this milieu may arise third-party rating providers clearly identified as dedicated to specific values or a specific type of programme. In this context, a premium should be placed on providing viewers with the most useful information to make content-based selections using their personal discretion. This would require the creation of sufficiently sophisticated information about the content. This information could be realised by the content producers or the third party rating providers. This would require also that a certain categorisation of the programmes would be organised in order for the viewer to pre-select programmes and then digest the information provided to her. Broadcasters, as some already do, may perform this task.

4. Positive approaches to parental choice

A second difference will be the shift from a combination of ratings and blocking mechanisms to inclusive or "white-list" electronic programme guides. In a pluralistic setting, some entities rating and recommending programs will merely approve a list of offerings rather than go through the far more cumbersome process of rating them or providing information on their suitability linked to age. Content screening organisations will download the unique programme identifiers of screened programs to those consumers who have selected them as screening provider. The consumer's screener choice would result in only those selected programmes making their way to the monitor. The emergence of screening entities specialised in children's programming delivery becomes more foreseeable. In order to avoid any untoward remunerative influences, such a system would require screening entities to be independent financially and administratively from the content creation industry as well as from content providers.

Thus, it is not only the technical nature of filtering mechanisms that will change with the shift from analogue to digital, but, very likely, the entire model of parental choice itself. Parents will, if they so desire, subscribe to competing content screening organisations, which may for instance be religion or value based, or appeal to linguistic or national identities. These screening organisations will perform both search and find functions (locating all programming that is in

the French language for example), while at the same time filtering out programmes inconsistent with the parent's goals as reflected in the choice of rating or filtering service. In these early days of digital, patterns are already emerging of the kind of content screening organisations that will appear. A limitation upon would-be filterers, however, is their ability to catalogue and categorise the millions of hours of material that will eventually exist for television, and their ability to gain a sufficient market share to underwrite the costs of rating this material. As demonstrated by the Internet, where a premium is placed on data about data, or "metadata", economic incentives arise to support the ability of metadata providers to gain access to this information. Similarly, in an EPG based interface where programming is sifted through and selected by navigating information about programme content, content producers are presented a tremendous inducement to make their programming widely available to information providers.

5. Recommendation for the transition

Since this Study recommends that no technical device be immediately mandated during the analogue stage of broadcasting, this places more emphasis on other means during the transition to a digital future. In the absence of widely available technologies for effective parental choice, other steps need to be taken to minimise harm to minors.

1. The primary emphasis on broadcaster responsibility, notably with regard to positive programming and the use of watersheds, should continue.

2. Informational rating systems, with an emphasis on on-screen icons, acoustic, or text-based warnings should be encouraged.

3. European co-ordination of on-screen icons should be facilitated to increase the acceptance of trans-frontier distribution of European works, and to enhance the protection of children. This co-ordination should proceed with the recognition of the presence of many impediments to implementing harmonised icons. Many of these impediments are legitimate manifestations of cultural, and State based differences, the protection of which is ensured by the E.C. Treaty of Amsterdam.

4. Standardisation of both analogue and digital transmission signals for programming related information. This standardisation policy should have two foci:

- New analogue sets and set-top box gateways: The NexTView standard endorsed by EACEM appears poised as the standard for EPG signals in analogue sets to be manufactured for Europe. Such technology should, if necessary, be encouraged to extend to proprietary set-top boxes as well. Proliferation of an EPG signalling standard will enable the voluntary use of the filtering and blocking capacities, promote the growth of multiple programme screening services and foster the acclimation of European households to multiple rating and information provision.

- Digital application programme interface (**API**): Regulatory authorities at European level should closely monitor the progress of industry groups (namely, DAVIC and DVB) and their constituent companies in achieving API interoperability. It is critical that the standard would not impose onerous licensing royalties on the industry and would strike the difficult balance between technical robustness and modest memory requirements. If the industry-led effort to interoperability shows signs of floundering, the

European Commission should be prepared to intervene.

1. A co-ordinated information campaign should be engaged, dealing with parental education and the development of proper attitudes toward the use of television by minors. This campaign should be fashioned after public campaigns in the tobacco and liquor areas. Licence requirements within Member States may be appropriately linked to participation in this campaign.

2. For the analogue transition to the digital era, partnership relations must be enhanced. These partnerships should be undertaken to advance three specific policy areas.

- Common descriptive criteria: Government, industry and citizen groups should contribute to the development of common descriptive criteria.

- Transmission standards: Industry and government should collaborate between and among themselves to establish the needed technical transmission standards.

- Media literacy: Industry, citizen groups, schools and advocacy groups should work to ensure the attainment of media literacy goals.

A European platform should be erected to co-ordinate at EU level, the gathering of these key actors in order to maintain a constant dialogue, share experiences and practices and plan for the future.

6. Encouraging pluralism in approaches to enhancing parental choice

One of the advantages of the digital environment will be the opportunity for multiple approaches to enhancing parental choice, allowing greater sensitivity to differences among populations of Member States, cultural values and determinations of appropriate concerns for screening and filtering. While the actual adoption of these mechanisms is still in the future, the Study recommends certain principles that could guide the Commission and media authorities in Europe.

The Study recommends, for the longer term, the following guidelines for a digital parental choice regime with elements applicable to the analogue transition:

1. To the extent possible, evaluative judgements should be based on transparent criteria evenly applied so that viewers may surmise the bases for determinations of a given age suitability. In addition, evaluative judgements should be developed through a partnership of stakeholders. In some instances, a Member State may establish criteria which it applies itself, or which are applied by third parties. This may act as a *referent* for viewers to gauge other ratings and information.

2. This principle of transparency and consistency within rating schemes does not mean that all groups must apply the same criteria to reach their judgements. In fact, competition among third-party rating providers will be based precisely on differences in criteria and the corresponding fidelity in applying particular criteria.

3. Where there is dependence on self-rating by producers or third-party ratings, supervisory or quality control measures should be established, either at the industry level or with the participation of the State. Such

entities, as in the US oversight panel, might have a mixed membership of public interest, industry and State representatives and may be guided by a code of practice developed by the relevant stakeholders

4. No limit should be placed on the nature of specific third-party rating, white-listing or similar parental choice initiatives (other than those related to consumer protection measures). Some rating services will be evaluative, some descriptive, some more clearly based on objective criteria, some based solely on the reputation of the third-party filtering entity. Where, however, it is the government that provides the rating service, or where the rating is more clearly a monopoly controlled by the industry itself, the consideration of transparency and objectivity becomes more vital.

5. Especially where pre-screened programme packages are assembled by third parties, the criteria for assisting parental choice will become quite extensive. Third parties will screen for religious and cultural preferences, varying philosophies of child-rearing, language training and criteria far removed from the current emphasis on violence and sexually explicit images. While niche filtering can be viewed as quasi-censorial and limiting the openness to many programme sources, the interest in encouraging pluralistic third-party and multiple rating approaches in a digital environment should take precedence over this concern.

6. In a world in which third-party preferential package approaches dominate, however, issues of creating a common public sphere and an understanding of a wide variety of differing values may rise in importance. One possibility is to suggest that some programmes, such as public service television or election coverage, be technically immune from screening devices. The Study suggests this for future consideration, and generally as a matter for consensus among rating entities rather than as a specific step to be taken presently.

7. One consequence of an approach which recognises multiple ratings of the same product by competing rating services is that there is no "correct" or even "best" rating for a programme. Even different broadcasters may rate the same programme differently where the evaluative rating is tied to the broadcaster's own reputation and function in the programming spectrum.

8. In this world, the multiplicity of rating providers or screening entities will also create the need for informing viewers in order for them to identify such entities properly. This task may be performed by a single body, popularly identified as an authority in the field of broadcasting activities in a given country and capable of providing viewers with the necessary information permitting them to assess the correspondence of the orientation of particular rating bodies to their own requirements and values.

7. Placing a premium on programme information

Associated with complex rating and labelling requirements are important considerations of information flow. The Study makes these additional recommendations dealing with access to information and transmission of information because the success of any parental choice scheme involves the creation of information about a programme and the transmission of that information to the parent. Rules or practices must be encouraged or developed concerning access to information about programmes; furthermore, additional practices must be established as to which participants must carry what information in what form. These include the following:

1. In order to facilitate the proliferation of third-party providers, efforts to minimise structural and legal barriers to entry to this market should be undertaken. Serious consideration should be given to the centralisation, at European level, of certain programming information functions such as the assigning of unique program identifiers. Similarly, both analogue and digital protocols in the basic architecture for affixing ratings and providing programming information should be designated (as it is already on the Internet within PICS). This should be obtained either by industry standardisation or legislative intervention.

2. In a system in which third-party ratings are to be encouraged, those third parties must have access to unique programme identifiers. Suppose that there is a Muslim third-party entity that seeks to establish, in a digital environment, a package of programming that it deems appropriate. If its threshold for violence or indecency is higher than that of the programmer or the broadcaster, it cannot receive, in advance, sufficient information from the standard descriptive labelling disclosures. It will include or exclude, based on experience, negotiation and on the unique program identifier. If however, it is to be effective in sending a packet of electronic information to its subscribers, it must have available an accurate set of such identifiers.

3. If a Member State requires programmers or broadcasters to self-rate, then any programme transmitted by the programmer should have the rating imbedded in the transmission of the programme according to the established technical standards.

4. Broadcasters as well as Teletext and EPG service providers should be very strongly encouraged to carry third-party ratings. Nonetheless, a decision by a broadcaster to carry or transmit the rating of one organisation or third-party entity should not oblige it to carry the ratings of other third-party services. In such an environment, it is quite reasonable to anticipate the rapid rise of an array of providers dedicated to different kinds of children's programming.

5. Where there is, under the law of a Member State, a governmental rating agency, the broadcaster or transmitter of information must carry that rating imbedded in the electronic transmission of the programme. At bottom, such ratings shall offer a *referent* to viewers.

6. The Study recommends the permanent provision of information concerning rating providers. This information should be provided at Member State level and should be generated by a designated body popularly recognised as an authority in media activities.

7. Newspapers should have access to industry self-rating information and a compulsory licence to publish it. Newspapers should be encouraged to contribute to media literacy and, in a variety of ways, to encourage parental understanding of video offerings and their responsibility. Newspapers should not, however, be required to publish such ratings, with the possible exception of providing the aforementioned *referent* rating. Newspapers can become third-party rating providers and determine what programmes they wish to rate and what rating or descriptive information to provide.

8. Broadcaster responsibility and regulatory monitoring

It should be explicit that any model for enhancing parental authority is not a

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wholesale substitute for broadcaster responsibility and government supervision. It need not become a substitute for parental responsibilities. No broadcaster or channel ought to be able to characterise a wholly inappropriate programme as acceptable merely because of the particular nature of the channel or service on which it appears.

Watershed rules should apply as long as people watch channels according to a schedule determined by the broadcaster. The appropriate body, at the Member State or European level, should anticipate that current patterns of television watching will persist, patterns in which there is substantial allegiance to branded channels and their time schedules. At some point, in a digital era, this form of television watching may change markedly and, at that point, watershed regulatory principles may not make sense. The mere fact that there will be a trend in this direction (particularly because it is not known how rapid the trend will be), is not a reason to abandon or weaken the watershed responsibility.

No matter how imperfect they are, the very existence of parental choice mechanisms will, in part, result in efforts to undermine broadcaster responsibility and the government's role in broadcasting. These demands should be resisted until there is sufficient confidence that parental authority and other associated techniques have made a major difference in the viewing habits of children.

An important question is whether the regime of parental choice ought to affect regulatory patterns for subscription television programming differently than patterns for free-to-air television. Satellite or cable channels of a specialised nature should be held to slightly less rigorous requirements. The selection of such channels demonstrates, to a small degree, parental choice. While this selection does not preclude parents and children from being unintentionally exposed to unsavoury material, the choice to introduce a given channel to one's home does create circumstances slightly different from merely turning the channels haphazardly among terrestrial offerings. Also, as some of the Study's country reports demonstrate, satellite services generally are packaged with greater capacity for continued parental choice options and with technical devices that facilitate that choice. For satellite services, in particular, watershed requirements may be altered or shifted because of the presence of the increased parental choice options that are inherent in the technical devices that accompany such services. This alteration is already reality in some countries such as the UK and Germany.

Industry based research on parental choices in the satellite and emerging terrestrial digital services should be maintained on a Europe-wide basis. This will provide a framework for future discussions of watershed and other parental choice policies. Cable distribution is far more varied than satellite signal distribution in terms of the availability of parental choice technical devices. Member States should encourage cable systems to upgrade their technologies to enhance their capacity for parental choice, and should provide incentives to do so by promising adjustment of watershed times and other similar requirements where appropriate.

9. Media education and literacy campaigns

In this study of Member State practices and practices elsewhere, one issue stands out above all others: no parental choice system, however user-friendly, however ample in information and easy to control, can work independently of a considered, well-funded education or literacy campaign. This will be true in the transition analogue period and in a digital era. Such a campaign must include an on-screen campaign, a campaign directed at children and parents as well as a general campaign involving society at large.

1. The Study recommends that as part of self-regulation, the broadcasters agree to the development of a continuous on-screen effort to provide general awareness of ratings and parental choice mechanisms. Such a campaign would differ from Member State to Member State. Such a campaign would be directed at children, to help them understand and to reinforce parental choices and to parents in terms of the legitimacy and importance of engaging in parental choice activity. The culture of self-rating and pluralism in rating underscores the need for increased media literacy and a greater role for non-government groups involved in media labelling in the process of literacy training in this area.

2. The Study recommends that there be a general awareness effort concerning parental choice mechanisms. Partly, this may be accomplished by the involvement of multiple rating efforts mirroring civic organisations. Also, individuals should be informed about modes of parental choice through their social lives; religious organisations, schools, ethnic and cultural entities. All groups that have a stake in building and reinforcing loyalties and see assisting members to shape identities as part of their role should participate on this plane.

3. The Study recommends that schools incorporate in their curricula critical viewing skills to enable children more effectively to understand the relationship of television to their lives and to encourage greater self-control over television viewing. Such curricula should also emphasise the importance of familial decision-making concerning television choices and should be worked out by a partnership of all involved.

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Chapter 1 - Technical devices and rating systems

Introduction

Often, a discussion of rating or labelling systems is divorced from the technical context in which the information contained within them is delivered to the parent or other recipient. Ratings can have broad notice and educational purposes; and how Member States generally fashion and administer them is discussed in Chapter 2. Further, accompanying media education campaigns and media literacy policies are vital components of any rating or labelling policy. This is true whether a rating or labelling system functions with or without a technical device. These considerations are discussed in Chapter 3. In this chapter, the Study explores a much more specific issue: when the decided function of advisory information is to trigger a blocking or filtering action what impact does the design of the triggering device have on the design of the label? The question can also be put in the converse: if the conditions of an ideal (or approaching an ideal) rating or labelling system are known, what technical device or set of devices can make that system operative?

1. Background

Rating and labelling systems find their origins in the world of film, and they had several purposes. Rating and labelling functioned, inter alia, to determine whether a film could be released at all (at least in some Member States) and to inform parents and others, for which groups a film was suitable. In some cases, film theatres are required to refuse admittance to a person because of the unsuitability of a film to his or her age.

The history of film ratings offers a guide to the issues that will be raised by implementing rating and labelling systems in the television sphere. Clearly, the primary purpose of television ratings is to provide information for potential viewers, but the other objectives of cinema ratings apply also to the debate over television ratings. For example, establishing a rating to determine whether a film should be released at all (or be played in theatres generally open to the public) has its correlative

in the question of continued broadcaster responsibility: whether a given rating determines that a programme cannot be shown; or can only be shown after the appropriate watershed; or only on earmarked, encrypted or subscriber channels. The Study will return to this question when examining the relationship between rating and labelling systems and continued areas of broadcaster responsibility.

For television, a technical device may prove to be the desirable equivalent of the box office manager refusing admittance to minors. Theoretically (and it was subject to some manipulation), a rating or label was an instruction to the ticket seller to refuse entrance to persons for whom the film had been classified as inappropriate. Like the ticket seller, technical devices for parental choice act as a gatekeeper, with the capacity to determine, even if approximately, whether someone who wishes to gain access is qualified to do so.

1.1 The search for a technical device: North America and the V-chip

The divined Golden Fleece of empowerment is a technical device that will allow a parent or guardian to control the television receiver so that programmes deemed undesirable will not be accessible to a minor under their care. Obviously, a rating or labelling system alone, while beneficial, does not sufficiently empower modern parents who, for a variety of reasons, may not be in custody of the receiver at the time that a programme decision is being made.

The V-chip, invented by a young Canadian engineer, Tim Collings, appeared to be the magic instrument for such parental empowerment. Originally, the V stood for Viewer, as in Viewer choice; later, it metamorphosed into V for Violence, to mark the particular kind of undesirability that was the motivating reason for adoption and promotion of the technology. As the debate in Canada and the United States matured, the V-chip was broadened to include undesirable programmes because of explicit sexual content as well as violent content.

At any rate, the V-chip provided the internal mechanism that would allow a parent to act, in advance, on information that was embedded in the programme. The technology promised to allow the parent to be an effective gatekeeper. The parent, using an

instrument like a remote control, could direct the television receiver to block out programmes that had particular triggering signals.

After a period of study and research in Canada in which the broadcast industry, other groups and the Canadian Radio and Telecommunications Commission worked closely together, the V-chip and an accompanying labelling system was finally adopted there in 1997.[1] In the United States, with the 1996 Telecommunications Act, the Congress ordered that the V-chip or similar technology be installed in all receivers of a minimum screen size and urged the broadcasting industry to develop an accompanying rating system on pain of further federal intervention. In 1998, a self-regulatory system for labelling was found by the Federal Communications Commission to be such an acceptable accompaniment.[2]

1.2 The European context

It is in this context that this Study appears. For a long time, Member States have had rating and labelling systems, more comprehensively for cinema but for broadcasting as well, and these are fully explored in Chapter 2. These systems have varied in terms of the degree of involvement of the State, the mode of communicating the result, the consequences of ratings, and the areas covered in terms of subject matter or age criteria. What has been common, until recently, is that the rating systems operated without a communication connection that triggered blocking or filtering activity at the home.

While the Study reviews this rating history, the V-chip debate in North America opened the question whether, in Europe ratings and labelling systems were or could be linked to technical devices that would permit parents to be more effective gatekeepers. As a result it was proposed under the revised Television without Frontiers directive to analyse the opportunities and threats of technical devices. This proposal mandates the current study.[3]

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[1] Report to the Canadian Radio-television and Telecommunications Commission from the Action Group on Violence on Television, April 30, 1997.
[2] Public Law 104-104, Telecommunications Act of 1996.
[3] 97/36/EC, *Television Without Frontiers Directive*, 30 June 1997.

1.3 The vital place of technology in choosing labelling alternatives

Almost immediately, it became evident that technology is far more determinative than might have been anticipated. One facile way of approaching the problem would be to ask whether the V-chip system itself should be adopted in Europe; the combination of the proprietary patented chip and a version of the labelling and rating system developed in Canada and the United States. In these countries, the painful processes associated with this intervention have already been undertaken. Determining what labels should cover (e.g. should they deal with age appropriateness or be more informative about content?), what elements could be called judgmental or informative, who should develop the ratings - all this had been fought over and resolved albeit on another continent, at least for the moment.

As it emerged in beginning this Study, the issue could not, for technological reasons, be framed in terms of European adoption of the North American V-chip model or not. The North American solution was an accident of its own peculiarities of programme delivery design. The particular pathway for transmitting labelling and rating information to the chip integrated into the receiver, namely line 21, field 2 of the Vertical Blanking Interval (VBI), was not practically available in Europe.

In itself, this obstacle to the adoption of the V-chip technology was important. But more vitally, it underscored a point that is often underestimated in the discussion over parental signalling. Available technological alternatives must be fully understood so as to appreciate the limits on which a parental choice signalling system can be adopted.

In the exploration of these technological limitations, some minimum characteristics can be defined: For a parental choice signalling system to function, the technical capacity must exist a) to download the information to the receiving equipment and b) for the receiving equipment to enact parental choice decisions based on that information. A necessary design characteristic is that information has to be downloaded with sufficient frequency so that information is co-ordinated with every change of channel or programme. A second necessary design characteristic-at least for an optimally desirable system-is that the system should be tamper proof. For there to be parental choice, by definition, the parental choices cannot be subject to easy

override by the child. To be useful in a European context, a parental choice signalling system must have some applicability in all Member States and must be tamper proof. The system must be of small cost to the viewer so that it can serve low-income families and comprehensible to the vast majority of parents and guardians

A second order question is how the optimal technical system would provide *parental choice*. Would the most desirable European system provide parental choice by *excluding undesirable content* or by *facilitating parental selection* of desirable content, thereby controlling the realm of programming available to minors?

2. Factors in the European environment affecting choice of technical device

At the outset, vital components in the analysis of the technological environment should be set forth.

2.1 The Transition from Analogue to Digital

Most important, any government policy relating to broadcasting must be sensitive to the underlying transition from analogue to digital broadcasting. We conclude that the architecture of a rating and labelling system will change as the shift to digital intensifies. This transition, fortunately, should permit the adoption of policies and technical systems in analogue that will *facilitate* the provision of a parental choice architecture in digital. Available analogue technologies and interfaces permit a useful, if not entirely unproblematic, system technologically as well as in terms of providing a user-interface platform compatible with the burgeoning digital context. Nonetheless, this transitional status and the technical shortcomings of analogue militate against mandating an analogue-dependent device. However, facilitating the voluntary introduction of certain parental choice methods within this analogue context is very likely to serve four important purposes:

- Promote the evolution of an adequate regime of analogue parental choice technologies (i.e. rating/information encoding, transmission signals, and receiver devices) to be available to parents during this transition to digital and the persistence of the use of analogue legacy sets.

- Enable households to use a *generally* effective device within the particular transmission and technical environment of their geographic region;
- Orient parents and viewers to the *kinds* of rating and information that should be made available to viewers, acclimating them to selecting among plural (i.e. non-State, non-monopoly) rating and information sources;
- Permit more detailed programming related information as an *alternative* policy to intrusive devices in a technically problematic analogue setting.

2.2 Direct and indirect transmission

There are other over-arching characteristics of technical devices that must be understood as well. For example, there is the difference between direct and indirect transmission of programme-related information. "Direct" transmission implies a mechanism that allows the parental choice information to track the programme itself, to be imbedded in it, to arrive simultaneously with it. An indirect mode of transmitting parental choice information can be effective, but it poses different challenges and uses different signals and devices. Some technical devices have, incorporated within them; specific blocking or filtering devices automatically triggered by the parental choice information. Some technical devices are adaptable in ways that make circumvention difficult; others are not. In many instances, the mode for circumvention is the use of the VCR where the technical device transmits data in such a way or at such a speed that it cannot be recognised.[4] In other cases, minor rearranging of the aerial to separate the two information streams can foil technical devices.

2.3 Need for a "Pipe" or "Pathway"

One of the peculiarities of the European setting is that it is difficult to find a universally available and adequate location for the download of information. In North America, the available space is line 21, field 2 of the VBI, space that was reserved for closed captioning. The V-chip system of parental choice depends on the existence of this pathway for information. It permits sufficient data to accompany a programme and provide the necessary trigger for blocking purposes.

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[4] See, *infra,* discussion in Section 3.1, pp. 32-33.

It is critical to begin with the understanding that the North American solution is not viable in Europe. Again, this is, as it were, a real estate question. The space consistently and universally available for the transmission of parental choice information is not available in a reliable way by any network within any Member State.[5] Furthermore, owing to the particular arrangements for transmission protocols in the Member States, there is no convenient alternative.[6] A universal answer with a common decoder facing a common mode of transferring information just is not a solution in the present analogue environment. Certain technological trends and the adoption of particular signalling technologies by broadcasters and receiver manufacturers are providing promise for the future of analogue. Yet, as explained below, the chain of technologies needed to effectively, robustly provide technical capacity for parental choice systems in analogue are not yet proven. Particularly, the technical differences in delivery modes (e.g. satellite, cable, and terrestrial) present serious difficulties in ensuring that adequate protection against circumvention can be presumed. Even assuming that the most viable chain of technologies was *sufficiently effective* to justify regulatory action, the necessary complements of signalling technologies have not been acquired by broadcasters to a significant enough degree to warrant the institution of requirements concerning analogue signalling systems standards at European level.

The anticipated digital environment, through the work of groups such as DVB and DAVIC (to be discussed below), is being primed to maximise interoperability, standardisation and protocol establishment. These standardisation efforts show noteworthy foresight and should be appreciated for the extent that they facilitate the creation of a technical platform for a best-case parental choice technical environment within Europe. These developments stand in contrast to the tremendous differences in standards and protocols from State to State in the analogue context. These

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[5] None of the array of Teletext-based delivery modes (packet 8/30, format 1; Video Programming System (VPS); Wide Screen Signalling (WSS); packet 31; packet 31 with embedded slow data rate component) are available throughout the EU's many regions.

[6] Perhaps the delivery mode with greatest reach in Europe is "packet 8/30, format 1". This path has been selected by Philips, for one, as the transmission mode of its TACS system for programme blocking. J R Kinghorn, "Laboratory Report: TACS: A proposal for a TV Access control system based on Teletext", (Philips Semiconductors Systems Laboratory Southampton, England, 21 January 1997). While the prospective reach of this transmission system may justify the product development by Philips and other manufacturers, the unavailability of packet 8/30, format 1 in a large number of regions among the Member States precludes its introduction as a comprehensive parental choice delivery system at European-level.

differences in analogue transmission are, to a significant extent, offset by the television manufacturing industry's efforts to establish technological platforms adequately capacious to operate among the varied environments. Nonetheless, there are important limitations to what can be and has been achieved by the industry on this front and thus cautious policy in this analogue setting is warranted.

2.4 Gateways

Gateways (usually in the form of set-top boxes) will play a vital role in the expansion, within the analogue setting, and in the introduction, within the digital setting, of parental choice mechanisms based upon electronic programme guides (EPG).[7] As is substantiated below, electronic programme guides provide a useful interface for the mobilisation of technical devices in the protection of children. Standardisation of transmission gateways and interoperability with new analogue sets is necessary in the analogue context in order to maximise the accessibility of EPG-based information.

In the digital setting, gateways are pivotal for mobilising the information capacity of digital technology. It is certain that set-top boxes will not only function as the gateway for proprietary subscription services, but will provide the translation of digital signals to analogue televisions. It is anticipated that the diffusion of this EPG information will be vital not only in so far as it informs viewers of content, but also in the way in which it can contribute to the development of third-party rating and information providers. The generation of plural providers is a pivotal matter and is dealt with more fully in the discussion of positive approaches versus negative approaches to parental choice, found in this chapter's concluding section.

2.5 Bit capacity

One of the key interactions between the nature of a technical device and the allowable rating system is "bit capacity" or "bits per second."[8] Most available analogue devices

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[7] For the purposes of the present Study, gateways are to refer to the intermediary technical devices that process transmission signals so that they may be interpreted by a given television receiver.

[8] "Bit capacity" or "bits per second" refers to the available space for data transmission via Teletext. A data packet is the means by which programming information, such as ratings, is delivered to the television receiver. These packets are constituted by bits. The rate of "bits per second", for example, determines the strength or robustness of the signal and thereby effects the level of corruptibility of the signal.

have very little bit capacity, or room for the sending of signals that convey information to the viewer or to the device that is programmed for off-on, blocking or filtering functions. The less the bit capacity and the information that can be conveyed, for example, the more likely the rating or labelling system will be terse and judgmental. Similarly, there is a correspondence between bit capacity and the capacity for grades of nuance among levels or criteria such as violence.

In the digital environment, these bit considerations are no longer. Thus, issues of robustness so significant in analysing analogue possibilities are utterly moot. In the digital environment, the question of bit capacity as contemplated within the analogue domain will essentially evaporate.

2.6 Tamper proof

One important design element, limited by technology, is whether a technical device is more or less impervious to tampering. In analogue, there are acute trade-offs between programme information capacity and signal corruptibility. Possible analogue technical regimes may, for example, allow more information in terms of bit capacity, but are more susceptible to tampering - such as separating the flow of programme related information from the programme itself or by using "time-shifting"[9] to avoid the blocking function.

In digital, the rating and information encoding may be utterly intertwined. The prospects of tampering in the digital context appear much less significant than in the current analogue environment.

3. Technical devices in the analogue setting and standard rating schemes

The following section presents an overview of several of the technical devices that have been discussed in the European marketplace and which are in various stages of introduction. The devices reviewed here have all been developed in the context of

[9] "Time-shifting" refers to accessing programmes intended to be blocked by using intermediate steps. The predominant technique is the child's use of a VCR that is incapable of responding to blocking signals to record a programme for later viewing by the child.

analogue broadcasting. Though, as indicated above, Europe is moving to digital broadcasting, and though digital approaches are making substantial headway, the present is predominantly one of analogue. Even in the future, analogue devices will be important because analogue sets frequently become the legacy of children, as replacement high-technology receivers result in the movement of their antecedents to the bedrooms of the young. In this transition from analogue to digital, gateways that can translate the digital signals in order to be interpreted by analogue receivers will be increasingly ubiquitous. The table on the following page demonstrates the present levels of televisions and computers in children's' bedrooms. As discussed later in this chapter, the likely pervasiveness of legacy sets coupled with the rise in the use of digital-to-analogue and other gateways in children's bedrooms should inform the development of policy during the digital transition and analogue legacy.

As will be seen, each of the devices discussed herein has, because of their technical composition, consequences for the design of a partner rating and labelling system.

Figure 1: Children's media equipment, TV based and PC based

Figure 1 a: Percentage of children with television, video and cable/satellite (a) at home and (b) in own room, by age group (6+)

Country		Television				Video				Cable/Satellite				Games Console			
		6-7	9-10	12-13	15-16	6-7	9-10	12-13	15-16	6-7	9-10	12-13	15-16	6-7	9-10	12-13	15-16
DENMARK	Home	100	98	98	96	91	92	91	95	62	50	55	56	39	49	38	38
	Bedroom	32	58	72	84	12	28	32	50	10	19	28	31	17	32	24	19
BELGIUM *	Home	92	91	97	97	89	84	88	92	-	-	-	-	41	44	69	65
	Bedroom	6	14	30	41	5	9	11	19	-	-	-	-	11	18	22	30
FINLAND	Home	97	92	95	96	92	92	86	93	40	29	32	38	36	50	47	38
	Bedroom	21	30	42	59	6	14	17	22	2	6	8	18	12	25	22	20
FRANCE	Home	99	99	99	100	91	92	92	91	26	26	24	19	48	52	65	59
	Bedroom	16	25	30	40	4	8	14	9	3	2	3	3	14	26	35	25
GERMANY	Home	98	96	100	99	87	84	88	89	74	63	84	87	17	35	39	32
	Bedroom	17	29	48	64	6	6	10	22	6	19	33	46	10	21	24	20
ITALY	Home	-	-	95	85	-	-	81	79	-	-	22	19	-	-	53	40
	Bedroom	-	-	52	54	-	-	19	17	-	-	6	4	-	-	34	24
NETHERLANDS	Home	99	97	100	97	95	92	91	90	[illegible]	[illegible]	[illegible]	[illegible]	36	53	58	42
	Bedroom	12	20	39	48	2	2	5	8	-	-	-	-	9	15	23	21
SPAIN	Home	97	92	[illegible]	[illegible]	77	54	75	[illegible]	43	23	25	41	40	48	62	60
	Bedroom	21	27	37	32	7	11	9	10	3	2	3	5	21	29	42	37
SWEDEN	Home	[illegible]	[illegible]	[illegible]	[illegible]	97	91	92	[illegible]	63	50	64	75	59	64	69	67
	Bedroom	25	37	51	64	8	11	19	35	8	9	22	33	13	32	41	34
UK	Home	95	[illegible]	[illegible]	[illegible]	70	89	[illegible]	88	[illegible]	[illegible]	[illegible]	40	42	59	64	54
	Bedroom	50	57	69	75	11	18	24	32	5	2	5	8	24	32	42	36
Average of above EU countries	Home	96	96	97	96	88	86	88	91	43	43	49	45	39	51	53	45
	Bedroom	22	33	47	56	7	12	16	22	5	8	15	19	16	26	33	27

Figure 1 b:Percentage of children with computer without CD-ROM, with CD-ROM and with modem (a) at home and (b) in bedroom by age group (6+)[10]

Country		Computer without CD-				Computer with CD-ROM				Internet Link/Modem			
		6-7	9-10	12-13	15-16	6-7	9-10	12-13	15-16	6-7	9-10	12-13	15-16
DENMARK													
	Bedroom	9	25	27	32	3	17	19	26	1	5	5	7
BELGIUM*													
	Bedroom	7	10	15	26	2	3	12	16	1	1	4	6
FINLAND													
	Bedroom	7	13	12	12	5	14	18	19	2	5	8	11
FRANCE													
	Bedroom	17	23	17	16	3	1	8	3	1	1	4	1
GERMANY													
	Bedroom	3	6	7	7	1	6	18	26	0	0	1	3
ITALY													
	Bedroom	-	-	17	18	-	-	23	20	-	-	5	6
NETHERLANDS													
	Bedroom	5	8	14	16	1	2	3	7	1	1	0	3
SPAIN													
	Bedroom	5	6	5	7	3	10	13	22	0	1	4	3
SWEDEN													
	Bedroom	8	12	23	30	2	8	16	23	1	3	8	13
UK													
	Bedroom	7	11	8	14	3	2	6	4	1	1	1	1
Average of above EU countries	Bedroom	8	13	15	18	3	7	14	17	1	2	4	5

*Belgium: Figures are for Flanders only

Source: Children's Changing Media Environment: Overview of a European comparative study, Dr. Sonia Livingstone, Katherine J. Holden, Moira Bovill, Media Research Group, Department of Social Psychology, London School of Economics and Political Science, 1998.

3.1 Teletext

Teletext provides important examples of technical systems using a direct mode of sending parental choice signalling information in an analogue environment. Several teletext-based systems may be made available within Europe. Two representative Teletext systems, Teletext packet 8/30 and Teletext packet 31, will be discussed in the

[10] These figures are the result of a multidisciplinary, multinational project investigating the diffusion and significance of media and information technologies among young people aged 6-17 years. The project was directed by the British team - Dr. Sonia Livingstone, Katherine J. Holden, Moira Bovill - and conducted by national research teams in eleven European countries (including Switzerland) and Israel. The national approaches followed a common conceptual framework and methodology, incorporating qualitative methods and a large scale survey involving some 15,000 children and young people across the twelve countries during 1997-1998. The book 'Children and their changing Media

immediately following section. A third Teletext-based system, analogue Electronic Programme Guides (EPGs), possesses distinguishing features from the other Teletext systems and thereby warrants a separate discussion below.

Teletext packet 8/30

As it happens, in the current mode of transmission of Teletext, there is a reservation for future use of bytes 22 to 25 designated under what is called "packet 8/30, format 1".[11] According to European Association of Consumer Electronics Manufacturers (EACEM),[12] the optimal data rate to ensure standard error protection[13] would deliver 18 bits per second, which would be sufficient capacity to provide basic parental choice signalling information. This '18 bits per second' scheme is twice the capacity of the North American "V-chip".

Under this Teletext system, the signalling information data is directly transmitted with the TV signal. Because it uses spare capacity in the Enhanced Teletext Specification (ETS 300 706), no new packets are introduced and it can be used in existing teletext hardware. An essential advantage of the Teletext system is that the decoding data can be contained in the same packet. The system is compatible with all existing teletext-appropriate television receivers, though software modifications are necessary. For this reason, the marginal cost of implementing this system is low.

All the news is not good, however. There are problems co-ordinating this particular technology and VCR avoidance as well as in preventing signal corruption from the manipulation of the receiving aerial.

Environment: A European Comparative Study' by Dr. Sonia Livingstone and M. Bovill (Eds.) is in preparation and will be published by Sage

[11] General Secretariat, "Possible methods for implementing parental control signalling in analogue TV systems", (European Association of Consumer Electronics Manufacturers (EACEM), 1998), 3.

[12] EACEM represents the joint interests of companies, national industry associations, associated national federations who manufacture in the countries of the European Union.

[13] Although as much as 32 bits are available in this mode, delivering just 18 bits frees up 6 bits for a error protection safety net to be transmitted simultaneous with the data to ensure that breaks in the primary data transmission will not cause a total failure in the delivery of the information, that a simultaneous transmission with the same information is sent as a back-up.

Under most schemes, the Teletext data is transmitted at a rate much higher than can be recorded on most VCRs. Unless there is a modification of format, of transmission mode or of VCR technology, the parental choice device can be avoided by a child by "time-shifting"; that is, by recording the programme and viewing later.

Technology that overcomes this high Teletext transmission rate problem will soon be introduced to the market. These VCRs will be able to record content data along with the content itself, thereby allowing a blocking function to be performed when the recorded programme is subsequently played back. Thus, the Teletext content data would be transmitted to the television receiver during playback and programming that initially would have been blocked in the direct reception from the transmitter would also be blocked when played as a VHS recording. This technology would be adequately comprehensive if accompanied by a proliferation of television receivers containing Teletext-based parental choice systems. Otherwise, time-shifting can be anticipated to be executed in conjunction with *set*-shifting. After recording an intended-to-be blocked programme, the child would then playback the recording on a television that does not have the Teletext parental choice system. Given the very high level of multiple television households throughout the Member States, this prospect is quite likely and the time-shifting circumvention is not, in practice, likely to be eliminated.

Further, the Teletext signal is easy to corrupt (where the aerial is portable), by moving or shifting the aerial. In sum, it is apparent that the Teletext system can be thought to be imperfect. It is more subject to avoidance through both aerial manipulation and time shifting.

Teletext packet 31

Packet 31 (also known as Independent data lines (IDL), at first blush, provides great versatility and robustness. It may be transmitted as an independent information stream or it may be inserted transparently into existing teletext streams. It can be transmitted on any available line in either field in the VBI. This IDL structure, specified in the "Data Transmission within Teletext" specification (ETS 300 708), is able to deliver up to 36 bytes per packet. The availability of this 36 bytes delivery is merely dependent upon the likely occurrence of otherwise unusable VBI capacity.

However, Packet 31 cannot be carried by all existing networks, is not receivable by the majority of current teletext decoders, and also suffers susceptibility to the time-shifting circumvention.

3.2 Wide Screen Signalling (WSS)

This system, like the most feasible forms of Teletext, uses existing and available European data packets and recorders. It takes advantage of the fact that there is space available in the information packet sent to signal to receivers whether a programme is in a Wide Screen or Normal Screen format. In some settings, this packet of information also triggers a "surround sound" system. The use of this packet approach has advantages over Teletext. Because the information is transmitted more slowly, VCR adjustment to its use is possible. Many of the advantages of immediate use that are characteristic of the Teletext model are available in the WSS context.

There are obvious disadvantages to the WSS system over the Teletext system. The major one is information as provided by the bit data capacity. Because there is only one spare bit of capacity, relatively little information can be transmitted. Thus, if the signal were more than a simple on/off signal, it would have to build up over a number of frames and thereby would increase the response time of the system. This rate of transmission impinges on the room for hardware error integration.[14] While it is true that this system is theoretically compatible with VCR recordation, no VCR decoders fitting this system are in production or use.

There are other of these analogue technical devices, using other pathways; in general, they share similar characteristics in terms of their constraints on the nature of rating and labelling systems that can be operative in conjunction with them and in terms of

[14] "Hardware error integration" refers to the transmission's capacity to send signals to the receiver in addition to and simultaneous with the primary signal. The serial data stream of WSS, a stream in which the signal to be decoded is built up over a series of delivered packets of one bit, has no capacity to send a protection stream as a back-up in case of transmission or reception error in the primary signal's delivery.

their susceptibility to manipulation and avoidance.[15] For these reasons, they present neither feasible nor desirable options at European level.

3.3 Audioband

A French manufacturer, Communications SA, is currently developing a device that would be triggered by signals affixed to the audio band within both analogue and digital transmission modes. This prospective device avoids the very crowded video band and would apparently be readily transmitted from any present broadcaster.

This prospective technology appears to avoid the common pitfalls of most analogue devices designed to function via video band signals. The device is purported to be able to read evaluative information as well as content indicators such as violence level and even a more qualitative description of a violent scene.

Unfortunately, the device is still under development and technically unproven. Further, while it appears there is significant room for information on multiple levels, it is far from certain that the device and its corresponding signal would be able to carry multiple levels of information from *multiple information providers.*

4. Shifting the paradigm: technical devices and plural ratings

The limited pathway and limited bit capacity of most technical devices, including the V-chip, reinforces the tendency toward judgmental rating systems (due to the structural limitations on descriptive qualities), and also encourages single, rather than multiple ratings. Chapter 2's ratings discussion presents these issues exhaustively. Assuming for now that the appropriate goal is a rating and information environment that facilitates both multiple sources of information and nuanced rating and information systems, the task then becomes to identify the technical regime(s) that would permit such a system. In other words, our inquiry in the present chapter is to characterise technical approaches that may be anticipated to enhance parental choice in a de-centralised, more multi-focal manner. Such an approach would be more sensitive

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[15] Video Programming System (VPS); packet 31 with embedded slow data rate component; and page-format Teletext are the relevant transmission modes referred to but not discussed here.

to the needs of different social and cultural groups and the needs of different Member States.

An implication of this shift toward a multi-focal approach is that the most useful, viable way to employ the information to be provided in this approach is via an affirmative, selective manner rather than an excluding, negative way. To best mobilise parental choice in this new television information environment would require *seeking* desired content rather than *designating types* of undesired content.

The use of electronic information to determine a list of programmes that will be *filtered in* rather than a list of programmes that will be *blocked out* may be among the consequences of this shift. Such a system might allow third parties to provide an electronic list of preferred programmes in a scheduled fashion. Individual viewers, rather than subscribe to pay services (e.g. Disney or Canal Plus), might subscribe to channels that organise programmes from all available information sources. In addition to determining what level of violence or sexual explicitness might be included, a group, for instance, might select a wider range of programming in French or Italian or more news and fewer "reality" programmes.

4.1 Electronic Programme Guide technologies in the analogue mode

Perhaps the most vital of current possibilities in this direction involves electronic programme guide (EPG) technologies and the adaptation called NexTView, an open standard developed by nineteen multi-national manufacturers of televisions within Europe,[16] starts with the notion of a system designed to give information about specific programmes and schedules, offer means of ordering the recording of programmes in advance and means of facilitating or pre-ordering shifts from one channel to another to organise television use in the increasingly complex multi-channel world.

It is precisely because the system is so enmeshed in programme choices based on information about the programmes that it is adaptable to a parental choice system.

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[16] Philips Consumer Electronics, "NexTView Electronic Program Guide gives more information at the touch of a button," *Philips Consumer Electronics Press Releases*, August 1997.

Already, in the minimum service, there is often embedded information about age suitability ratings. By including a decoder, information can trigger a parentally programmed block.

NexTView presents promising technical features and enjoys a virtual consensus among manufacturers as a standard for electronic programme guides. However, its analogue transmission mode shares the corruptibility and reliability concerns that burden other analogue modes. It shares the same corruptibility problems as the other Teletext-based and video-band based technologies discussed above. It suffers reliability problems in that it is a parallel signal, delivered along side the content transmission. As a result of this parallel delivery, the EPG timekeeping may not always map precisely with the actual boundary (i.e. the beginning and ending) of programming. Thus, in blocking scenarios, the suppression process would be based on *expected* transmission time. Similarly, in white-listing scenarios the reception of programmes would be based on the expected time and, in cases when the programme mapping did not correspond precisely with the EPG timekeeping, would run the risk of inadvertently picking up unintended and undesirable programming. The NexTView technology includes Programme Delivery Control (**PDC**), a real-time switching signal which is designed to compensate automatically for imprecise programme delivery timing, allowing for blocking in real time rather than expected time via transmission of a unique PDC code. This PDC code may be sent for each programme, delivered once per second throughout the programme's duration. In the long-term analogue context, this PDC technology will figure prominently in the mobilisation of EPG capabilities as either filter or block. However, at present there is highly uneven availability of PDC signalling by broadcasters in the Member States.[17] Further, there are substantial limitations to using PDC signalling via satellite or cable delivery.[18] Serious reliability

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[17] For instance, BBC1 and BBC2 are currently broadcasting a fully operational PDC service in the UK, except for Scotland where it remains experimental. See Wiseman, Andrew. Programme Delivery Control Explained. Internet WWW page: <http://www.users.dircon.co.uk/~bandc/a.wiseman/625/pdc.htm> (version current at 3 Jan 1998). Although PDC is a European standard (despite not being ratified by the EBU), few remaining UK broadcasters have adopted the service and few broadcasters in other Member States have elected to provide this service.

[18] Ibid. The primary difficulty with using PDC on satellite and cable is that to do so requires the changing of the channel to look for the programme identity label (PIL) in order to identify the date, channel and start time of the programme. For most video's, this it is impossible to change the satellite or cable channel.

concerns for services from these delivery modes militate strongly for a cautious endorsement of PDC signalling as a comprehensive solution to the time mapping problem. Nonetheless, carriage of PDC transmissions in analogue should be encouraged among the Member States. PDC does show promise as an important modality that should be anticipated to provide an integral component in the effort toward EPG mobilisation as a parental choice technology in the analogue setting. NexTView's use of this technology potentially as both a filter and block should precipitate its broader pan-European embrace.

Notwithstanding these concerns, the NexTView electronic programme guide provides the best approach within existing and foreseeable analogue possibilities. It provides value to households by facilitating selection and blocking choices and it contributes to the general orientation of television viewers towards programming related information. The premium on programming related information applies regardless of the transmission mode. The changing transmission mode of television from analogue to digital should not bear negatively upon the orientation of households to this information. Rather, the change in the capacity of transmission modes and receivers to provide information should be a spur for emphasising analogue technologies that provide levels of information comparable to what can be expected from the digital environment.

While the NexTView technology relies on Teletext (the various pitfalls of which have been outlined above), it nonetheless provides the best means within the analogue setting for the provision of programming related information. Moreover, within a positive approach to parental choice in which, *inter alia*, specific programming, particular channels, designated timeframes and third-party-provided programme packages are selected from an EPG menu by parents, corruption of the EPGs Teletext signal would completely disable the television. This is starkly different from the use of the EPG under a negative approach. A disabled EPG under a negative, blocking orientation would disable the parental choice mechanism itself and permit all content to make it to the screen. Thus, many of the corruption and circumvention shortcomings in analogue are obviated when EPGs are deployed positively rather than

negatively. An elaborated discussion of the differences between and implications of positive versus negative approaches is provided below.

4.2 Prospects for EPGs in the analogue environment

Our qualified and limited recommendation of analogue EPGs prompts a further inquiry. Namely, what is the present and foreseeable future availability of this technology within European television households? This question of household penetration is multi-faceted. One part of the answer is a function of the anticipated purchasing of TVs with the NexTView open standard. The other part of the answer examines the likelihood of an EPG signal standard for other set-top box gateways. The most sensible way to discuss the NexTView standard's expected presence in European households is to first look at general television purchasing trends and to then consider the likely effects of the availability of digital-only sets on the analogue market and also the anticipated overall market share of NexTView sets.

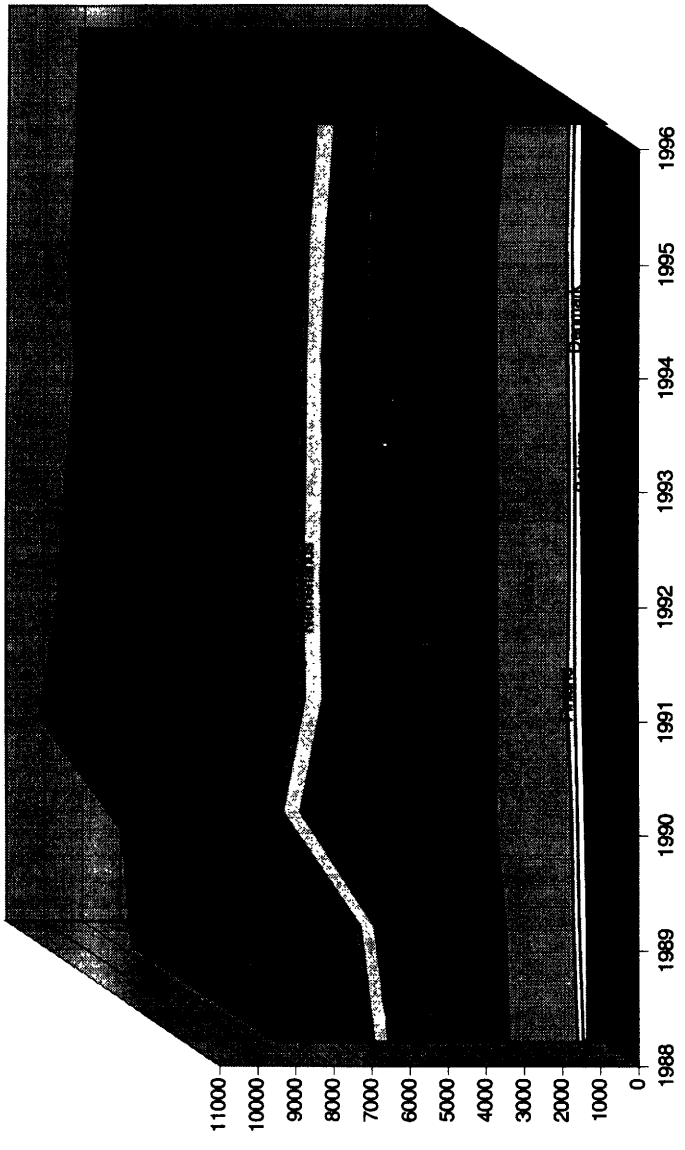

Figure 2: Household TV set expenditure 1988-1996 in millions of ECUs

NexTView

The determination of NexTView household presence must be based on firstly, the television replacement cycle throughout Europe, and secondly, the predicted levels of NexTView market-share in the new television market. These questions will be addressed in turn.

Reliable figures for the rate of television replacement among European television households are not readily available. Within the UK, between ten and fifteen years is cited. At any rate, the pre-eminence of UK households in terms of rate of spending on TV-sets will bear greatly on the overall market for new analogue televisions.

Figure 3: Household TV set expenditure 1988-1996 in millions of ECUs

Country	1988	1989	1990	1991	1992	1993	1994	1995	1996
Austria	211	233	256	287	277	294	307	297	273
Belgium	200	218	244	254	274	277	284	302	296
Denmark	133	169	186	179	173	178	214	217	207
Finland	165	184	172	191	145	157	152	150	136
France	1768	1790	1984	1859	1897	1894	1876	1850	1745
Germany	1623	1741	3086	2793	2940	3093	3140	3174	3101
Greece	242	323	350	213	218	222	152	159	163
Ireland	54	42	50	52	58	55	94	93	91
Italy	1212	1280	1602	1494	1382	1140	1119	1010	1043
Luxembourg	10	11	12	13	13	13	13	13	13
Netherlands	420	386	457	466	481	477	498	494	512
Portugal	154	144	182	207	220	201	147	135	120
Spain	759	795	949	1026	878	809	822	848	839
Sweden	282	326	326	324	286	240	277	273	277
UK	1361	1243	1160	1184	1134	1061	1148	1109	1263
EU-15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Source: Statistical Yearbook '98, European Audiovisual Observatory.

While UK households will be within the ambit of some of the world's heaviest digital programming saturation, paradoxically they are quite likely to be able to receive analogue signals longer than any other Member State due to their public broadcasting

history and policy commitment to universal access. Thus, whether and, if so, when the combination of Sky's and Ondigital's digital programme offerings will attain a critical mass and effectuate the transition to digital transmission remains an open question. Among the possible implications of this indeterminacy is that it is likely that the NexTView standard will have a healthy market in Europe. For one, the UK's analogue history and likely persistence of analogue transmissions long into the digital era point to a relatively healthy analogue set market. While Philips, a leading manufacturer of televisions within Europe, asserts that by 2000, over 40% of new televisions purchased within Europe will possess the NexTView technology, even a substantially more conservative estimate would warrant the view that this technology will enjoy significant household penetration in the near future.

While figures for European household TV set expenditures generally hover at ten billion ECUs, the level of digital acquisition in the immediate future is not anticipated to cut dramatically into this figure. As a result, it is not unlikely that the NexTView technology will attain a very high profile in European households.

An open standard for analogue EPG signals

Determining the maximum diffusion level of analogue EPGs requires more than pacing through the NexTView household penetration inquiry outlined above. Attaining this determination requires identifying the foreseeable level of set-top box presence within European television households. This examination presupposes the establishment and use of an open (or at least quasi-open)[19] standard analogue EPG signal interoperable with the NexTView protocol. While this should not be flatly presumed, for this inquiry, we will assume an industry-wide requirement or embrace of such a standard.[20] After the immediately following set-top box penetration inquiry, the discussion will return to the merits behind and *likelihood* of establishing and proliferating such a standard.

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[19] Compare *Directive 95/47/EC of the European Parliament and of the Council of 24 October 1995 on the use of standards for the transmission of television signals*, Article 4(d), wherein the licensing requirements of industrial property rights holders to "ensure that this [license granting] is done on fair, reasonable and non-discriminatory terms."

[20] However, it should be indicated that the weight of evidence supports this conclusion.

To determine the existence of an opportunity to extend the presence of analogue EPGs in European television households, data regarding the penetration of subscription services must be evaluated. While the front lines of the transition to digital are surely in the subscription television territory, it is nonetheless helpful to examine the household penetration rates of cable and satellite (with their accompanying gateways), keeping in mind the dynamics of this transition period.

With subscription services come gateways. At minimum, gateways function to allow subscribers to receive their subscribed services and to prohibit non-subscribers from receiving programming for which they have not paid. These gateways, beyond their conditional access function, can also provide the technical locus for proliferating EPGs to a larger number of analogue households.

Penetration levels for cable and satellite are quite varied throughout Europe. The Benelux countries have very high levels of cable households (Belgium 97%, Luxembourg 95%, and Netherlands 94%). These rates within these small States are roughly double the median percentage of penetration among the remaining States. Denmark (56%), Finland (44%), Germany (44%), Ireland (44.9%), and Sweden (50%) have substantial degrees of cable (and to lesser extents, satellite) penetration, while Italy (0.2%), Greece (less than 1%), Spain (3.6%), and Portugal (11.3%) are outliners in both cable and satellite categories. The combined average of all fifteen Member States for cable households is 39.8%. The average for satellite households is 13.4%.

Figure 4: Household Penetration Rates of TV, Cable and Satellite in 1996/1997

Country	Number of total private households (TPH) in 000s	Television households (TVHH) in % of TPH	Cable households in % of TVHH	*Date*	Households with Satellite in % of TVHH	*Date*
Austria	3282	99%	37.4%	*End 1996*	36.1%	*End 1996*
Belgium	3759	96%	97.0%	*1996*	5.0%	*1996*
Denmark	2328	98%	56.0%	*End 1997*	42.0%	*1996*
Finland	2150	97%	44.0%	*End 1996*	12.0%	*End 1996*
France	22889	94%	9.7%	*Jul-97*	5.7%	*End 1997*
Germany	35272	97%	44.0%	*1996*	30.0%	*1996*
Greece	3646	96%	*	*1996*	1.0%	*1997*
Ireland	868	97%	44.9%	*End 1997*	9.0%	*1996*
Italy	22285	100%	0.2%	*End 1997*	4.8%	*End 1997*
Luxembourg	140	100%	95.0%	*1995*	5.0%	*1996*
Netherlands	6400	98%	94.0%	*End 1997*	4.7%	*Jul. 1997*
Portugal	3574	98%	11.3%	*End 1997*	8.0%	*1996*
Spain	15080	99%	3.6%	*End 1997*	8.2%	*End 1997*
Sweden	3889	96%	50.0%	*End 1997*	10.0%	*End 1997*
UK	21528	97%	10.0%	*Feb-97*	20.0%	*Feb. 1997*
EU-15						

* Exact data not available, how ever, total number of television households passed by cable is less than 1%.

Sources: European Commission, Information Society Project Office, European Survey of Information Society, January 1998; European Market and Media Guide, December 1997. Market research International, February 1996, Euromonitor.

These significant penetration levels in most States are due, in large measure, to the burgeoning digital market. This digital context is discussed in a later section, but for the purposes of the present discussion it should be noted that the digital market's growth is outpacing the analogue subscription services. Importantly, all pay-per-view broadcasters transmitting in analogue at present are scheduled to transmit in digital mode by the end of 1998. While these channels do not envision ending their analogue transmissions anytime in the near future, and legacy sets should be expected to receive analogue signals for years to come, this is still an important development.

Figure 5: European Pay-per-View operators (excluding sports only), 1997-1998

Country	Operator	Services	Transmission mode		Broadcasting mode		Launch	Channels
			Analogue	Digital	Cable	Satellite		
Denmark	TeleDanmark	Tvbio	x		x		11/1996	1
	TeleDanmark	Tvbio		x	x		2/1998	10 - 12
	Canal Digital/TeleDanmark	Kiosk		x		x	3/1998	24
Finland	Canal Digital	Kiosk		x		x	3/1998	24
France	Canal Satellite	Kiosque		x		x	4/1996	10
	CGV Cable	Kiosque		x	x		4/1996	10
	Lyonnaise Cable/FT Cable	Multivision		x	x		1994	2
	Télévision Par Satellite	Multivision		x		x	11/1996	7
Germany	DF1	Cinedom		x		x	7/1996	16
	Deutsche Telekom Cable	Cinedom		x	x		7/1996	8
	Deutsche Telekom Cable	Premiere PPV		x		x	11/1997	4
Italy	Telepiù	Telepiù PPV		x		x	3/1998	8-12
Netherlands	A2000	Moviehouse	x		x		3/1997	5
	Casema	Casema Plus	x		x		3/1997	6
	Mediakabel	Mediakabel PPV		x	x		11/1998	14
	Canal Plus Nederland	Canal Plus PPV		x		x	1998	?
Spain	Canal Satélite Digital	Taquilla		x		x	3/1997	25
	Via Digital	Canal Palco		x	x	x	11/1997	5
Sweden	Svenska Kabel-TV	Bio Hemma	x		x		1/1996	4
	Svenska Kabel-TV	Bio Hemma		x	x		7/1998	10-12
	Canal Digital	Kiosk		x		x	3/1998	24
UK	Telecential, Comtel	Take One	x				12/1997	4
	TeleWest, NTL, Diamond Cable, General Cable	Front Row	x		x		7/1998	4
	BSkyB	Sky Box Office	x			x	12/1997	4
	BSkyB/Cable & Wireless Communications	Sky Box Office		x		x	1998	40-50

NB. By the end of 1998 all analogue Pay-per-View broadcasters will start transmission in digital mode in addition to analogue. This does not mean, however, that analogue pay-per-view will cease to exist. On the contrary, the conversion of the existing analogue subscriber base will be a long process in those markets which have not yet launched digital.

Source: Statistical Yearbook '98, European Audiovisual Observatory.

Perhaps of greater significance, many of the new digital satellite stations are transmitting in digital mode *solely*. Nonetheless, simultaneous analogue and digital transmissions should co-exist for many years into the future in most Member States. The scheduled shut-off of analogue signals has been mandated in several States (e.g. Germany 2010, Spain 2012 or earlier, Sweden 2008), however the persistence of analogue signals as the predominant transmission mode for many if not the majority of European television households does not seem to be in jeopardy for a number of years. In the context of the present discussion, it is noteworthy that this predominance does not necessarily correspond to an increase in subscription services and their corresponding gateways. The likely persistent analogue signal broadcasters will be the traditional terrestrial channels, located in countries like Italy were terrestrial analogue provides what is commonly deemed as a sufficient array of programming. In these areas, the incentive to seek services that would introduce gateways to households is lacking.

It is readily apparent that speculating on the trajectory of analogue subscription services is precarious given the present state of flux outlined above. At a minimum at this juncture, it does not appear prudent to anticipate that analogue gateways will be increasingly introduced into households at a significant level. Whether this consideration supersedes the potential benefits of standardising analogue EPG transmissions in conjunction with other analogue initiatives is not necessarily certain. As indicated above, the NexTView open standard is likely to have a significant penetration within the European market.

Despite these less than compelling findings regarding analogue gateways penetration, establishment and use of an open, or at least quasi-open, standard analogue EPG signal is still worthy of further consideration. While the above gateways discussion does not clearly point to an increase in analogue gateways, it does not conclusively indicate a decline. Further analysis may indicate that it would be sufficient impetus to facilitate signal standardisation merely if the current analogue gateways household penetration levels sustain.

In the past, Directives concerning television transmission standards have been promulgated with the aims off generating a single European broadcast market.[21] While these Directives did not achieve this goal,[22] the prospect of standardisation attaining less ambitious aims should not be deduced from this failure.

With this said, the remaining substantial question is whether promulgating an open standard interoperable with the NexTView standard would be economically onerous for any of the implicated industries. Given that EACEM, the consortium of television manufacturers, have adopted the NexTView standard, manufacturers should not be anticipated to suffer injury due to such standardisation. Similarly, broadcasters are also free to adopt the open NexTView standard. Whether such adoption is overly costly to the broadcaster is a separate matter, but the market leverage the NexTView standard is likely to attain in the analogue domain should be anticipated to warrant broadcaster adoption of this standard regardless of whether more interventionist measures are taken. Thus, it appears that market pressures alone may very well obviate regulatory action on this front.

4.3 Voluntary EPGs as a primer for the digital environment

In spite of the outlined limitations of the technology as a blocking mechanism, facilitating a voluntary analogue EPG environment in anticipation of a more technically robust digital environment may serve several purposes. First, it is likely to contribute to the orientation of parents and children to the use of this sort of technology and, more importantly, to the use of the accompanying programming related information. Second, it can contribute greatly to the generation of plural rating and programming related information providers.

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[21] See Commission of the European Communities, *Directive on the adoption of common technical specifications of the MAC/packet family of standards for direct satellite television broadcasting,* 86/529/EEC, see also, European Commission, *Directive on the adoption of standards for satellite broadcasting of television signals,* 92/38/EEC.

[22] Richard Collins observed that "... the Directives on television transmission standards ... express the dominant assumptions in the Community of the early and mid 1980s; that a single broadcast market would unify the Community culturally (and therefore politically) and would assist the development of the Community's audio-visual hardware and software industries. However, neither Directive established the single market which they were conceived to implement (*Broadcasting and Audiovisual Policy in the European Single Market.* (London: John Libbey, 1994, p. 114))," quoted in D. Goldberg, T. Prosser, and S. Verhulst, *EC Media Law and Policy* (Essex: Longman, 1998), p.54.

Given that the digital transition will progress over many years and that both analogue transmission and analogue receivers will persist in Europe for decades into the future, policy should strive to import the promise presented by digital technology to the foreseeable analogue future. To this end, extant EPG technology within analogue should be anticipated to be increasingly pervasive and, in several ways, an adequately robust means of delivering a level of *information* comparable to that enabled within the digital setting. The greatest shortfall of EPGs as a parental choice mechanism in the analogue setting is their vulnerability to circumvention. EPGs in an analogue setting represent, if not an invulnerable prophylactic, at least a valuable precursor to technically more sound parental choice mechanisms to be found in the digital setting.

As discussed above, standardisation of signals for programming related information is essential to ensure that the presently proprietary configuration of set-top boxes and other gateways converge to share standards for the transmission of signals concerning rating and programming information. As in the case of the United States,[23] industry groups should be allowed to lead (either by market forces, policy articulation or a combination of both) in the designation of digital and analogue signal standards at European level. The formal standardisation of transmission signals can be seen to subsequently effectuate a de facto standardisation among manufacturers of receiver devices. In the European digital arena, DVB and DAVIC have achieved a tremendous level of standardisation.[24] This trend should be further encouraged so as to ensure the establishment of a European API standard.

A second desirable outcome of encouraging the proliferation of analogue EPGs is that it can provide what would amount to an incubator function for plural rating and programming related information providers. The promotion of plural providers (as discussed in Chapter 2) should be permitted to become a defining feature of parental choice within the digital context. The analogue EPG is a useful predecessor to the future digital environment. The information capacity of analogue EPGs is comparable to the capacity within the digital context. Similarly, abundant capacity to store

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[23] Federal Communications Commission, *In the Matter of Carriage of the Transmissions of Digital Television Broadcast Stations,* CS Docket No. 98-120, Released July 10, 1998.

information and the significant integrity of the signal as a parental choice mechanism mobiliser are anticipated to be indispensable properties for prospective digital devices serving the multi-national, multi-cultural Europe. Thus, the technical capacity to transmit signals encoded with information provided from multiple sources is within reach. However, in order to have these plural providers of rating and programming related information, the generation of a place and function for these third parties must begin well before the transition is complete. The corresponding need for information providers in addition to at least supplement the traditional, monopoly rating providers will steadily increase with the growing volume of programming.

A seamless vocabulary: reaching a common descriptive criteria

The analogue third-party providers' role should be crafted to allow a seamless transition to the digital forum. To this end, structuring the format of ratings and programming related information in correspondence to the envisaged technical platform is an appropriate measure. Given the anticipated latitude within the expected protocols or "syntax",[25] such structuration should not effect the functioning of programming related information providers within the analogue setting. Because the fundamentals of an information system are the vocabulary or basic explanatory elements, establishing a rating vocabulary is of a high order for ensuring a seamless transition from analogue to digital in the provision of rating and programming related information. Such a vocabulary will be needed to provide the vitally important common descriptive criteria at European level. Again, the technically imposed restrictions upon such a vocabulary should not prove to be overly limiting. Rather than present these considerations in the abstract, the further explication of a rating vocabulary is provided within the digital framework discussed below.

4.4 Information as an alternative to technical devices

The technical limitations of the analogue environment preclude compulsory adoption of any technical regime. Nonetheless, this study appreciates the multiple benefits of

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[24] See, *infra*, the discussion in footnote 57, of the fallout among consumers over the row between BDB and BskyB over digital interoperability.

[25] "Syntax", in this case, represents the grammar for the embedded labels that form the fundaments of the descriptive language for rating and programme information. The primacy of this technical

encouraging the use of EPGs. Above all else, though, EPGs within the analogue setting must be appreciated for their functioning as an *alternative* to technical devices. It is not the capacity of this analogue technology as a blocking or filtering mechanism that militates for its broader availability among Member States. Rather, it is the technology's premium on information that is ultimately most compelling. Whether EPGs may be trusted as a signalling system, as outlined above, in an important sense is beside the point. No technology in analogue can be totally depended upon. The technical capacity latent in the digital future enables the deployment of an optimal rating/information environment as a signalling medium for parental choice mechanisms. Such an environment is necessary to address the culturally and socially variegated European Union. However, in the foreseeable digital future, *selection* of programming rather than the attempt to exclude undesired programming is the most viable way in which parental choice mechanisms may be expected to be used.

In conclusion, the importance of endorsing this technology in the analogue setting is three-fold. First, it allows for the voluntary use of a technical device (probably the best analogue option albeit one that is ultimately too susceptible to circumvention). Second, it provides a way to orient parents and viewers to both the kinds of rating and information that should be made available to viewers as well as acclimates them to plural (i.e. non-State, non-monopoly) rating and information sources. Third, the provision of more detailed programming related information is the best alternative policy to a problematic analogue setting.

5. Technical devices in the digital setting

While substantial digital availability across Europe is far off and the recently established technical protocols and standards are subject to change in the ensuing years, the promise of a technical capacity to store and provide multiple rating and information sources in a transmission mode with low vulnerability to tampering should not be ignored. Hence, an elaboration of the relevant Digital Video Broadcasting Project (DVB) and the Digital Audio-Visual Council (DAVIC) standards are provided

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grammar can best be appreciated from its role in the Internet-based PICS (Platform for Internet Content Selection) system. Syntax provides the genetic coding for the expression of metadata.

herein in order to substantiate this Study's basic recommendations concerning the establishment of technical protocols.

Preliminarily, the Study indicates that the establishment of these standards under the onus of DVB and DAVIC should be anticipated to ultimately address the relevant technical considerations adequately. This, in turn, should provide a technical platform that may enable the introduction of Europe-wide common description criteria. Such a common criteria may permit the evolution of an optimal rating and programming related information environment at European level. The contours of the present and recommended rating and programming related information environments are outlined in the following discussion.

5.1 Digital television at present

As indicated in the Executive Summary, the digital future poses a transformative opportunity for parental choice signalling information. The architecture of digital signalling expands the way from a unitary and centralised rating system to one that is multiple and largely non-governmental. The very specific flaws that are characteristic of the analogue environment are not present in the digital era. The digital "pipe" that ties the receiving set to a source or sources of information about the programme is very substantial, in many respects beyond comparison to analogue levels of receiving data flow. If a lesson may be learned from the United State's V-chip experience, it is that establishing standards within an analogue setting greatly constricts what is possible in the ensuing digital setting. The digital standards established under the onus of the US's Consumer Electronics Manufacturers Association (CEMA) have regrettably inherited the limitations of the preceding analogue system. Consequently, the rating regime structured around the carrying capacity in Closed Caption has constrained the subsequent digital transmission standard to using only a fraction of its information capacity. Fortunately, Europe is not inhibited by such a legacy. Were the converse the case, it would be hard to envisage a viable European approach to parental choice mechanisms. Europe's multi-cultural constitution requires a more sophisticated technical architecture in order to carry the information of multiple rating providers.

These ratings considerations, however, presuppose the actual deployment of digital television. Incrementally, digital television is becoming a European reality (see Figure 6). This is indicated, in part, by the dramatically increasing percentage of satellite households within the UK (due to the onset of digital satellite stations courtesy of *Sky* and *Ondigital*), and the substantial proliferation obtaining in other States as well. *Premiere* of Germany and Austria has added a significant number of subscribers in the past few years as have the various *Canal Plus* satellite stations dispersed throughout Europe. In Spain, a newer satellite station, *Cineclassics/Cinemania*, had a tremendous growth rate of 139% between 1995 and 1996 alone. (See "Broadcasting mode of pay-TV channels and subscription growth rate"). It is important to note that several satellite stations, particularly the *Filmnet* channels in Belgium, and Scandinavia and *Sweden's TV1000* have suffered precipitous declines in the past years. Nonetheless, the aggregate trajectory for increased penetration for subscription services is ascending.

Figure 6: Broadcasting mode of Pay-TV channels and growth of subscription, 1993-1997 in thousands[26]

Country	Channels	Broadcasting mode: Terres. trial	Cable	Satellite	Launch	1993	1994	1995	1996	1997	Growth 1996-97	Growth 1995-96
Austria	Premiere		x	x	02/95	32.0	42.0	51.8	67.0	-	n/a	29.3%
	Teleclub	x	x	x	4/94	-	-	-	-	-	n/a	n/a
Belgium	Canal+Belgique	x	x		9/93	149.8	161.7	171.6	181.3	181,5	0.1%	5.6%
	FilmNet Vlaanderen		x		12/89	165.0	185.0	200.0	157.0	-	n/a	-21.5%
	Canal+Vlaanderen		x			-	-	-	159.2	161.0	1.1%	n/a
	Supersport		x		1995	-	-	80.0	-	-	n/a	n/a
Denmark	FilmNet Scandinavia			x	9/89	80.0	100.0	52.0	-	-	n/a	-42.2%
	Canal+Denmark		x	x	9/01	-	-	-	-	-	n/a	n/a
	TVS	x		x	2/01	-	-	-	-	-	n/a	n/a
Finland	FilmNet Scandinavia			x	6/90	42.0	48.0	65.0	50.0	-	n/a	-23.1%
	Canal+Finland		x	x	09/01	-	-	-	-	-	n/a	n/a
	PTV				1996	-	8.0	14.0	-	-	n/a	n/a
France	Canal+	x	x	x	11/88	3708.4	3870.0	4070.0	4466.9	4593.2	2.8%	9.8%
	Cinécinémas		x	x	1/95	195.0	293.0	375.4	421.0	-	n/a	12.1%
	Cinécinéfil		x	x	1/95	170.0	267.0	340.9	384.0	-	12.6%	12.6%
	Multivision		x	x	6/98	-	-	-	-	-	n/a	n/a
Germany	Premiere		x	x	02/95	723.0	860.0	1011.9	1337.0	1455.0	8.8%	0.0%
Greece	TV Plus			x	12/92	6.0	6.0	-	-	-	-	n/a
	Filmnet		x	x	10/98	-	3.0	-	-	-	-	n/a
Italy	Telepiù	x		x	6/95	544.0	650.0	800.0	-	-	n/a	n/a
	Tele+				8/01	-	-	-	865.9	868.2	1.3	n/a
Netherlands	FilmNet Nederland		x		3/89	155.0	180.0	190.0	-	-	n/a	n/a
	Canal+Nederland		x	x	8/01	-	-	-	166.4	224.1	34.7	n/a
	Supersport		x		1994	-	-	150.0	-	-	n/a	n/a
Spain	Canal+España	x	x	x	9/94	767.6	969.6	1204.6	1366.1	1464.9	7.2%	13.4%
	Cineclassics			x	6/98	-	21.0	41.0	98.0	-	n/a	139.0%
	Cinemania			x	6/98	-	21.0	41.0	98.0	-	n/a	139.0%
Sweden	FilmNet Scandinavia			x	6/90	185.0	215.0	200.0	148.0	-	n/a	-26.0%
	Canal+Sweden		x	x	9/01	-	-	-	-	-	n/a	n/a
	TV1000		x	x	12/93	305.0	288.0	296.0	235.0	-	n/a	-20.6%
	FilmMax				9/96	13.0	12.0	-	-	-	n/a	n/a
UK	The Movie Channel			x	3/94	351.2	356.0	-	4006.0	-	n/a	n/a
	Sky Movies		x	x	2/93	576.2	560.0	-	-	-	n/a	n/a
	Sky Movies & TMC			x	1994	1800.0	3000.0	3085.0	4068.0	-	n/a	31.9%
	Sky Sports 1		x	x	1994	-	2800.0	3123.0	4176.0	-	n/a	33.7%
	Sky Sports 2		x	x	1994	-	-	-	-	-	n/a	n/a
	Disney Channel		x	x	1994	-	-	2792.0	3850.0	-	n/a	37.9%
	Zee TV		x	x	1994	-	80.0	95.0	130.0	-	n/a	36.8%

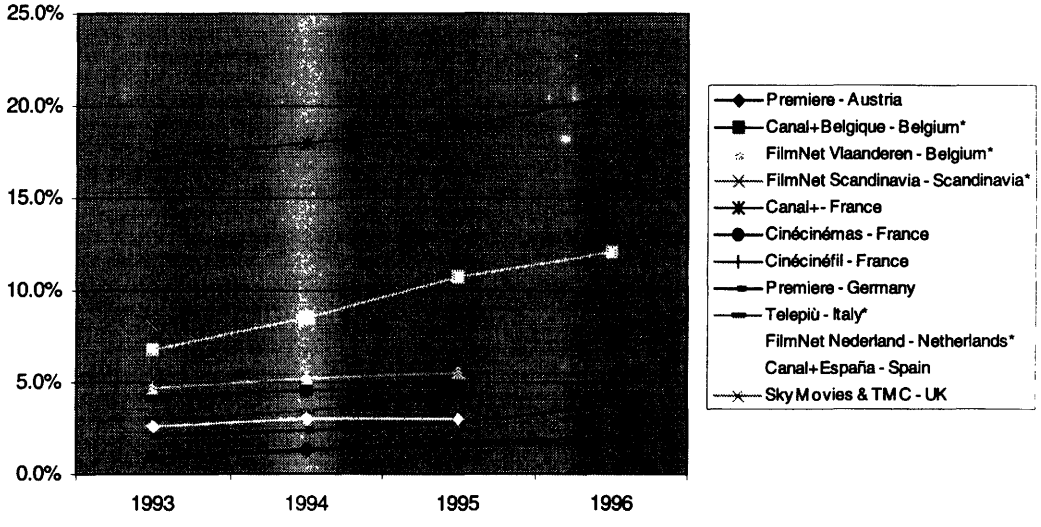
* figures not available

NB All of these channels started transmission of their signals in analogue mode, the majority is, however, progressively moving towards digital transmission. Due to the current transition period it is difficult to say which stage of a trial or implementation phase each of these channels has reached.

Source: Statistical Yearbook '98, European Audiovisual Observatory.

[26] Portugal has two pay-tv services (Tele Cine 1 and Tele Cine 2) provided by the cable operator TV Cabo since 1997 but figures for subscribers are not available. Luxembourg is not included in this list as there are no pay-tv services; it is possible that some households subscribe to foreign pay-tv (Canal+, Canal+ Belgique) in which case they are included in the figures for the country providing the service. The same goes for Ireland where households may subscribe to BSkyB; subscribing households will be included in the figures for the UK.

Figure 7: Growth in TV households subscribing to selected pay-TV services, by channel and country, 1993-1995/96



* Data for 1996 not available

Initial efforts within Member States may be examined to determine whether useful directions are being taken. Within several of these new digital services, basic blocking services have been made available. An overview of the available blocking modalities provided in these different digital channels follows. It must be noted that these initial steps severely under-use the technical capacity inherent within the digital setting. This under-use, to a significant extent, is a function of the lack of rating and programming information.

Present digital blocking modalities

In Germany, for example, there are two digital satellite channels, *Premiere* and *DF1*. *DF1* uses a set-top box named the "d-box". This gateway enables blocking of specific programmes as well as entire channels through an EPG menu. This particular "d-box" has received heavy criticism within Germany because of its complexity.[27] It has been

[27] The umbrella organisation for German media regulators, Direktorenkonferenz der Landesmedienanstalten (DLM), commissioned the Jugend Film Fernsehen Institute to investigate the

criticised as being difficult to use. While this technology is accessed through an electronic programme guide, the absence of a specific menu for the "protection of minors" mode has lead parents to describe the use of the device as "uncomfortable" and "impracticable". The problem does not appear to be the rating system or information itself, but rather the interface which parents must employ to act upon that information.

In Spain, the satellite platform of *Via Digital* is a useful example of a pioneering digital technology. Beyond requiring a smart card in order to decrypt the signal, this digital satellite platform provides an EPG with filtering software. The present filtering possibilities through this EPG are very basic. Parents may lock particular channels or block programmes according to three options: one of two age group ratings (age 14 or age 18), or according to sexual content. If age group 18 is selected, then the programmes labelled as having sexual content are also automatically filtered. This is an example of the use of an information-poor rating system with an information rich digital platform. Similarly, Spain's *Canal Satelite Digital (CSD)* requires a satellite dish and set-top decoder. The decoder includes an EPG navigation software. The main menu of the EPG allows parents to lock entire channels.

Sweden is also experimenting with digital broadcasting and its relationship to parental choice mechanisms. Terrestrial digital network television is to be introduced in January 1999 and the Swedish government designs to completely phase out the existing analogue during 2008.[28] While information concerning parental choice mechanisms and detailed information regarding electronic programme guides are not presently available, SVT, the State-owned television company, has indicated that EPGs should be neutral, national and include all distribution modes (terrestrial, cable and satellite).[29] The SVT also recommends that the EPGs should possess links to EPGs for all the

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possibilities for technical devices applicable to digital and encoded television programmes. This investigation unambiguously criticised the utility of the d-box: "Technical devices for protection of minors irrelevant to practical parental guidance". Helga Theunert, *Jugendschutz im digitalen Fernsehen: eine Untersuchung der Technik und ihrer Nutzung durch Eltern.* Publications of *Die Landesmedienanstalten*, no. 11 (Berlin: VISTAS, 1998.)

[28] "Sweden Digital Television Network Rollout Decided," *FT Asia Intelligence Wire*, March 23, 1998, Business section.

[29] Ibid.

other Nordic countries to facilitate the Nordic States becoming a single market, potentially countervailing broader European imperatives.[30]

The Swedish national broadcaster recommends that suppliers of services and equipment decide on a common standard for decoders, thereby allowing Nordic viewers to receive broadcasts from all of the distribution modes. At present, there is a lack of standardisation among the three modes of distribution as well as within the cable and satellite modes individually. Again, the Swedish are recommending that decoders be standardised not only within and across transmission modes, but also among the Nordic States.[31]

Within the UK, the emphasis has been on introducing digital terrestrial television as outlined by the UK Government in the Broadcasting Act 1996.[32] Digital Terrestrial *(DTT)/Ondigital* was launched 15 November 1998; Digital Satellite *(Dsat)/SkyDigital* started its services in October 1998; and Digital Cable *(Dcab)* is expected in early 1999.[33] Concerns were recently aired, mainly by the BBC, concerning proprietary operating systems that will not work satisfactorily with free-to-air services on a competitor's platform. Oftel (the Office of Telecommunications) therefore clarified that any integrated television set that cannot receive and display all free-to-air services, with full functionality, will be in breach of the *Advanced Standards Television Directive* and associated regulations.[34] Full functionality for free-to-air services can be achieved by embedding in sets the open standards selected by Britain's network broadcasters.

At present, *Sky Digital* EPG is, to an extent, representative of the way in which EPGs can function as parental choice devices. The EPG provides a title and synopsis of each movie/episode; it provides BBFC (British Board of Film Classification) movie certificates; and it has "Reason Code" fields with high levels of Sex, Violence,

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[30] Such a regional orientation may be seen to transgress the European Union's internal market principles. " The Treaties establishing the European communities as amended by the Treaty on European Union and the Treaty of Amsterdam".
[31] "Sweden Digital Television Network Rollout Decided," 23 March 1998.
[32] United Kingdom, Parliament. *Broadcasting Act 1996, Chapter 55*, 24 July 1996
[33]. "Special Survey of Technology and Entertainment: Wheel of Fortune," *The Economist*, November 21, 1998.
[34] "BBC says Digital Televisions Must Guarantee Viewers Access to All Services," BBC Press Release, 14 October 1998.

Language or Mature Themes. An S,V, L and/or M can be indicated in the Reason Code field on a voluntary basis. The *Sky* EPG has also its own parental choice device, allowing parents to require a PIN to be entered in order for particular programmes or channels to be viewed. In addition it also allows parents to set a threshold price for pay-per-view events such that if an event exceeds that threshold, a PIN number is required to purchase the event.[35]

5.2 The future of digital parental choice systems

The present array of blocking and filtering devices within the digital context do not fully exploit the technical capacity inherent within this environment nor do they give a full sense of the digital future from the point of view of enhanced parental empowerment. In the future, the screening, filtering and blocking environment (as indicated above in the discussion of Electronic Programme Guides and NexTView), will become more plural, more organised by groups in society, more voluntary, and more varied.

The major current effort to develop the technical standards to make this possible, as alluded to earlier, is the Digital Video Broadcasting Project (DVB). This is an organised effort to establish European standards that may provide a platform for the optimal use of digital technology in presenting programming related information and effectively deploying parental choice mechanisms.

DVB's Service Information system

DVB, constituted by over 220 broadcasters, manufacturers, network operators and regulators, was formed with the aim of establishing at a global level a "family of standards" for the delivery of digital television. DVB has provided a standard, MPEG-2, for the compression of image and sound data prior to transmission.[36] This digital standard was created with the goal of providing high levels of commonality and compatibility among the four digital TV formats i) Limited Definition, ii) Standard Definition, iii) Enhanced Definition and iv) High Definition.

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[35] Sky digital homepage. WWW page: <http://www.sky.co.uk/digital/skyguide.htm>.

Within this MPEG-2 architecture, the DVB also has a standard for viewer/signal interactivity. This standard, called Digital Video Broadcasting - Service Information (DVB-SI) intimates the programming information possibilities available within the digital setting.[37]

DVB Service Information is designed to "act as a header" for MPEG-2, the digital containers of compressed image and sound described above. DVB-SI establishes the point of contact with any type of digital receiver, indicating the technical nature of the attached MPEG-2 container. This "header" function, by its purpose of identifying programmes, is a primary step in mobilising any blocking or selecting technology.

The DVB Service Information system can be used by the decoder and the user to navigate through the array of digital services offered. DVB-SI adds information that enables automatic tuning (via a DVB Integrated Receiver Decoder (IRD)) to particular services and allows services to be grouped into categories with relevant schedule information. These latter categories can be conceived as "bouquets". The DVB-SI table architecture, discussed below, has established a specific protocol for this bouquet function.[38]

Thus, DVB-SI is partly dedicated to providing a foundation for a digital Electronic Programme Guide[39] and also to providing the capacity for distinct encoding for each

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[36] "Implementation Guidelines for the use of MPEG-2 Systems, Video and Audio in Satellite, Cable and Terrestrial Broadcasting Applications," *DVB Standards and Bluebooks, version 1.1*,DVB Document A001 rev 4, July 1997.

[37] "Specification for service information (SI) in digital video broadcasting (DVB) systems," *DVB Standards and Bluebooks, version 1.1*,DVB Document A038 March 1998.

[38] This bouquet architecture may enable the positive approaches suggested under section 7 of this chapter. "Specification for service information (SI) in digital video broadcasting (DVB) systems," *DVB Standards and Bluebooks, version 1.1*,DVB Document A038 March 1998: 27-32.

[39] The manner of presentation of the information is not specified, and IRD manufacturers have freedom to choose appropriate presentation methods. It is expected that Electronic Programme Guides (EPG) will gee a feature of digital TV transmissions. The definition of EPG is outside the scope of the SI specification, but the data contained within the SI specified here could be used as basis for an EPG. The present specification describes Service Information (SI) for use in broadcast MPEG-2 bitstreams. The MPEG-2 System layer specified SI which is referred to as Programme Specific Information (PSI). The PSI data provides information to enable automatic configuration of the receiver to demultiplex and decode the various streams of programme within the multiplex. [Digital Video Broadcasting: Specification for Service Information in DVB systems. Scope and field of application]

State.[40] Hence, the DVB Service Information protocol provides the beginnings of a platform for programming related information in the European digital TV environment. The DVB-SI standard, as is the goal for any interoperability standard, provides the minimum technical specifications for basic interoperability. More sophisticated EPGs can be layered on to this foundation through a data service or a particular receiver interface.[41] This SI would allow applications running on a set-top box to use the DAVIC Service Consumer System specifications.[42] Applications would need these specifications in order to implement electronic programme guide applications that are not built into the particular set-top box but can be "dynamically downloaded".

These technical trends strongly indicate that EPGs, while vital in the present analogue transition, will provide an even greater function in the digital environment regardless of their prospective use as parental choice mechanisms. EPGs are the perceived means for making sense of and navigating the volume of channels and programming will be available within the digital setting. Thus, viewer familiarity with this interface will be a patent feature of digital television. Also, a user-friendly and straightforward EPG/parental choice design should be anticipated to arise from these consensually based protocol and standardisation efforts.

Returning to the particular technical concerns implicated by parental choice mechanisms, the DVB-SI platform is necessary for ensuring the universal access of programming related information regardless of the source of the information or the transmission location of the corresponding programming. This SI architecture may

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[40] Thus, specific ratings as determined within a given Member State may retain their connection to that State. However, this technical feature cannot, by itself, address the issues of providing rating information for programming from one state in accordance with another State's standards and criteria. In other words, programming originating from State A and assigned a rating by State A's rating entity may be delivered within State B without any evaluation using State B's rating criteria even though the technical capacity to affix this rating information exists.

[41] "Specification for service information (SI) in digital video broadcasting (DVB) systems," *DVB Standards and Bluebooks, version 1.1*,DVB Document A038 March 1998: 13-25.

[42] DAVIC is a non-profit Association based in Switzerland, with a membership of over 175 companies from more than 25 countries. It represents all sectors of the audio-visual industry: manufacturing (computer, consumer electronics and telecommunications equipment) and service (broadcasting, telecommunications and CATV), as well as a number of government agencies and research organisations.

provide the capacity for the desirable level of programme information within the multi-cultural European context.

However, in addition to the DVB-SI protocol, a deeper level of interoperability must be achieved in order to realise the optimal technical environment. While significant strides toward comprehensive interoperability recently have been made, remaining steps must be taken. The following discussion outlines some of these steps necessary to attaining an optimal technical environment.

5.3 Movement to presentation layer interoperability

In digital television, the application programme interface (API) is essentially an application execution engine. In other words, it serves a somewhat analogous function to a computer's operating system. The establishment of API interoperability is needed to enable broadcasters to develop interactive applications that can run on different receiver and set-top box platforms across Europe.

This API interoperability is required in order for a digitally based parental choice regime resembling what has been outlined in the preceding pages. Attaining this interoperability is, in principle, a core goal of both DVB and DAVIC. As efforts to create Europe-level interoperability are afoot, there is a simultaneous effort by some of the more powerful players and industry groups to create a global standard for presentation layer interoperability.[43] For European policy makers, it is beside the point to anticipate which standard would be adopted if this global effort ultimately were to succeed; Europe has the opportunity to select a viable, open platform. Such leadership likely would militate strongly against subsequent efforts by the likes of Intel or Microsoft to establish a global standard incompatible with even a nascent European standard, assuming that such an European protocol was not encumbered by onerous licensing royalties and was not prohibitively costly or memory intensive. However, this assumption that a European protocol would avoid these licensing and technological pitfalls requires greater scrutiny. As of late, the effort in Europe to obtain this

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[43] Intel, Microsoft, and America's Advanced Television Systems Committee (ATSC) are at the forefront of the effort to establish a global standard, see "Field report," *Broadcast Engineering* (March 1998).

standard has grown more contentious and problematical.[44] DVB has recently articulated the group's aspiration to establish a protocol with a next-generation API, focusing upon creating a Java-compliant protocol with three separate profiles: "enhanced broadcasting", "interactive TV", and "Internet access."[45] Superficially, at least, these developments signal important progress toward finally creating a standard. However, the backdrop upon which these developments are set makes the scenario more complicated.

As recently as March 1998, a different sort of consensus was in operation. DVB's working parties on interactive TV had reached a consensus: The DAVIC, MHEG-5 standard would provide the future for digital in Europe. However, shortly after this inchoate consensus was made apparent among broadcasters, Canal Plus announced its embrace of a version of MHEG-5. Rather than a critical endorsement, this move was perceived by the broadcasting community to be an attempt to usurp this non-proprietary standard. This profound apprehension amplified the scepticism concerning MHEG-5's technical capacity to deal with an increasingly Internet-based environment.

Curiously, this scepticism of MHEG-5's technical prowess did not translate into greater support of a Java-based API. The robust Sun/Javasoft solutions are perceived with perhaps even more critical eyes. The cost and hardware requirements of the memory-hungry Java-solutions make many in the industry nervous. Most important is the uncertainty over whether the proprietary Java can be a quasi-public standard with licensing royalties at a level that will not prevent its broad adoption. Clearly, creating an API standard has become a less-than straightforward endeavour.

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[44] In addition to the difficulties surrounding the operation layer protocol discussed here, establishing more rudimentary interoperability in digital signalling and receiving, at State levels, has also suffered substantially from the conflicts between proprietary interests. For instance, the row between British Digital Broadcasting (BDB) and BskyB over set-top box, conditional access systems and EPG interoperability has had, at least at this early stage, a somewhat chilling effect on the consumer approval of digital services as indicated by the opinion poll conducted by NOP Media. See "UK: Consultant's report points to digital confusion ITC to resolve Sky/BDB dispute" *Interspace*, 6 May 1998. This poll, conducted in April 1998, showed that 50 per cent of consumers intend to wait for a set-top box or integrated digital TV that can receive all platforms. Thirty per cent of NOP's sample intended to wait until the issue of compatibility is resolved. NOP Research Group, Public opinion surveys archives. WWW page: <http://www.nopres.co.uk/Archive/publicopinion.htm>.

[45] "The DVB Interactive TV Debacle," *Inside Digital TV*, 14 December 1998, sec. no. 8.

In November 1998, DVB officials met in California with Sun Microsystems to discuss adoption of a Java-based system.[46] The Java effort is hitting full stride, with DVB and Sun in serious negotiations. DVB as well as its American counterpart, Advanced Television Systems Committee (ATSC), have expressed their concerns over Java-licensing issues with increasing emphasis.[47] It is not unlikely that within the foreseeable future, DVB will establish standards to enable presentation layer interoperability.

The progress of this API situation should be monitored. It is not sufficient that a standard be reached. For an API standard to be viable in Europe it must be clear that it will not subject the implicated industries to onerous royalties and that it will strike the difficult balance between technical robustness and modest memory requirements. It is not entirely certain that such an appropriate standard is guaranteed to result from the work of the industry groups and software entities. Given the vital importance of the API for the functioning of parental choice systems (let alone the fundamental importance of API interoperability for European digital television as a whole), it is incumbent upon the Commission to very closely follow the progress of this standardisation effort. The viability of digital parental choice systems hinges upon true API interoperability.

Syntax

With the creation of a common API at European level or in accord with a global standard, the digital environment may allow for the standardisation of programming information syntax. The syntax standardisation would, in a way not dissimilar from PICS in the Internet context,[48] provide a technical platform for the provision of information about content that far exceeds the explanatory power of simple labels or icons. While such icons are important and useful in certain respects (as outlined and espoused below), they are ultimately limited, particularly in a multi-cultural European

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[46] Junko Yoshida, "Microsoft, Sun duel hits new turf -- In WinCE end run, Europe seeks new Java subset for digital TVs, set-top boxes," *Electronic Engineering Times,* 23 November 1998.
[47] Junko Yoshida, "Consumer crowd cozies up to Java," *Electronic Engineering Times,* 18 January, 1999.
[48] Paul Resnick, *PICS:* "Internet Access Controls Without Censorship," *Communications of the ACM,* vol. 39 (10), (1996): 87-93.

context. Thus, the standardisation of an API in conjunction with the creation of a programming information syntax would enable both the optimal level of content information that may be provided in an electronic programme guide and the formation of a generative environment for multiple, independent labelling and information providers.

Common descriptive criteria

To allow for seamlessness both in the long *co-existence between* analogue and digital as well as in the encroaching *transition from* analogue to digital, shared labelling and information vocabularies at European level should be encouraged in order to provide a common descriptive criteria. As in the digital environment where a standard API will enable a technical platform for a syntax for receivers to receive labels and information, the analogue signals will also require standardisation (most likely the NexTView standard) to ensure interoperability. To the extent possible within these two platforms, a shared "labelling and information vocabulary" should be facilitated at European level. Such a vocabulary existing within the parallel digital and analogue environments will obviate potential rating and description discontinuities created by differences in the delivery mode (i.e. analogue or digital) of the programming. As these delivery differences should not have implications for the content, they should, as much as technically possible, also not implicate the nature of their associated labelling and information. Thus, a shared vocabulary is necessary. To advocate for this harmonisation is not, however, to assert that the vocabulary of this singular digital language should not include multiple *dialects.* In other words, the over-arching vocabulary for content labels and information should affect the difficult equipoise between accommodating the range of cultural and linguistic diversity within Europe and sustaining a shared language, as it were, at European level.

6. Technical devices, ratings and watersheds

One oft-expressed goal for improved rating and labelling systems is to effect the obsolescence of watersheds and other forms of broadcaster responsibility, as described in Chapter 2. There could be a time when parental choice technical devices have high penetration in television receivers and the social context is such that these devices are

responsibly used by parents and adequately observed by minors. However, it is unlikely, given current imperfections in the capacity of analogue-specific technical devices, that this level of use will take place during the foreseeable future of the digital transition.

Broadcasters across Europe, as a rule, take their responsibility toward programming content very seriously. Awareness among broadcasters of the expectations of their viewership is keen. Dire consequences are anticipated for betraying this confidence.[49] Use of watersheds are embraced by broadcasters as the most efficient, effective means to providing content that may be inappropriate for children in a manner that permits parents to share responsibility with broadcasters and broadcast such content at a time when children are least likely to be viewing television.[50] These arguments that support watershed requirements today are very likely to be just as convincing tomorrow. Governments may wish to measure the actuality of parental exercise of responsibility as a barometer for the suspension of watersheds. They may wish to discontinue watershed requirements at a time when parental choice can be more easily facilitated (through greater notice of programme content and the existence of technical devices) than is true now. But neither condition is likely to occur.

In a somewhat distant future, digital television may gravitate toward a more demand-driven delivery architecture. Rather than broadcasters (or, for that matter, narrowcasters), providing set programming timetables, programming menus may allow viewers to simply select from a menu and then receive the chosen programme. While this kind of delivery is available, in some instances, within pay-per-view services, this orientation may ascend from the margins to become the mainstream due, in large part,

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[49] Both public service providers (e.g. RAI in Italy, TV2 in Denmark, Bayerischer Rundfunk in Germany) and private broadcasters (e.g. Canal+ and TF1 in France) strongly expressed these sentiments in surveys conducted during this Study. Broadcasters have an interest in overstating their commitment to this public confidence as well as the close relationship between broadcasters and audiences; they rightly fear burdensome regulation and being saddled with new technical and rating requirements. While these sentiments are likely overstated, it is hard to argue that they are fundamentally inaccurate. These responsibilities and relationships are long-held and enforced by negative audience responses as well as State governmental intervention.

[50] The above-stated sense of broadcaster responsibility is indicated most strongly by the critical role of watersheds among nearly all Member States. At bottom, national regulatory muscle undergirds watershed functions. On the surface, the long-standing social reliance on watersheds evinces the sense of shared responsibility between parents and broadcasters so frequently mentioned in the survey responses of broadcasters. Generally, broadcasters viewed watersheds as the most effective means to effecting the desired protection of children.

to the technical capacity inherent in digital. Such a shift in the way in which programming is made available would require a corresponding total evaluation of how the protections normally achieved through watersheds can be attained in a radically different context. Beyond identifying this possibility, it is past the scope of the present Study to address the implications of this prospective shift.

Returning to the foreseeable future, it is more likely that self-regulation will become a more varied, more inclusive process and will include third party interventions. Already, institutions like Internet Watch Foundation[51] have sprung up in the multi-jurisdiction environment of the Internet to provide labelling or rating structures that can facilitate the use of EPG or digital filtering and screening mechanisms. Even industry-led self regulation of the future is likely to involve establishing or supporting third-party entities or allowing access to programme information by preferred and approved third party entities.

6.1 Convergence and the new digital environment

It is important to invoke "convergence" when addressing the potential for parental choice signalling systems in this new digital information environment. This convergence is a meshing of television rating and labelling systems with mechanisms being developed for the Internet. Already, there is stand-alone filtering software commercially available that provides parents options of choosing what kinds of material to block.[52] These are often imperfect, at least at the present stage of

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[51] Internet Watch Foundation. WWW page: < http://www.internetwatch.co.uk/> (version current at 16 Sep 1998.)

[52] For a representation of the array of software options, see Stenhammer Net. WWW page: http://www.stenhammar.net/kidsafe/filter.html (version current at 12 Aug 1998).

development, and are both under-inclusive and over-inclusive in terms of their various filtering capabilities. Some computer retailers bundle stand-alone filtering software loaded onto the computer's hard drive. Much criticism has been directed at these stand-alone filters, but the point is that the methodology there can be adjusted for television in a new parental choice environment.

Finally, there will be a convergence between television rating and labelling systems and the Web-based PICS filtering for third-party rating mechanisms. Ideally, any organisation can create third-party labels, self-label their own content and use other labels to filter or organise Web access. To date, the use of filtering devices by third party groups has not been rapid and the concept is still in the process, itself, of permeating civil society. It is likely, however, that the involvement by these organisations will increase. The issue is whether a world in which such third parties play the dominant role in rating, labelling and filtering should be encouraged as compared to centralised rating and labelling by the State or reliance on self-rating and labelling by producers and broadcasters.

As illuminated in this study's discussion of rating systems (Chapter 2), the carry-over of the limitations in existing approaches to rating and information provision would be the retention of an unnecessary and undesirable vestige of prior administrative and technological limitations. The two greatest values of digital technology writ large are that interoperability readily may be established and that digital has tremendous storage and transmission capacity. These two features must not be merely acknowledged in policy making for the digital era, rather they must *inform* policy. Thus, not only are the present issues concerning exposure or protection of children from harmful content fundamentally different from those in previous periods and in other media, they are not constrained in the ways which limited policy in the past. The macro-level orientation to parental choice must be crafted to ensure that the regulatory milieu facilitates the optimal uses of technologies, recognises the qualities of television media particular to the digital area, and addresses the salient points of policy forged by this technological area. Thus, for reasons amplified in the section immediately below, a positive approach to media technology is imperative. A positive approach is grounded in the pragmatics of the digital content onslaught. It is designed to foster a market for

programming related information rather than to obtain this information through coercion and dis-incentives.

7. The costs of a negative approach and the benefits of a positive approach to child protection

As indicated above, the technical limitations within the analogue setting pre-empt a cost/benefit analysis of the available devices and their corresponding system. While the study recommends broader availability of EPGs and a corresponding expansion in the arena of rating and information provision, it is clear that compulsory technical systems within the analogue setting is not a sensible policy option. Within digital, the study has identified the powerful standardisation movement afoot under the auspices of DVB and DAVIC. The resulting protocols should be anticipated to provide the sufficient technical platform for the best-case rating and programming related information environment at European level. In essence, the parental choice delivery system is a "free-rider". The technical standardisation creates the enabling environment for the necessary systems at European level. This standardisation is moving forward without any aid from parental choice efforts in any form. Thus, the technical costs of a digital technical regime, on this level, is non-existent.

Although the cost of the *technical* system in and of itself may be properly seen as a collective consumption good, cost *does* become an issue for consumers and manufacturers. While the signalling standardisation is the important technical determination, manufacturers will design signal receiver elements to this standard at varying costs. While it is correctly anticipated that the cost passed to the consumer should range from nominal to negligible, it may nonetheless be a small consideration. The cost of developing devices is partially offset by the establishment of standards.

Rather than individual manufacturers bearing their own research and development costs for each technical system and device element, these costs are essentially shared and distributed throughout the entire industry. Furthermore, the costs appertaining to parental choice systems are not separable from the general costs of manufacturing the related technical systems and devices. For instance, the standardisation of an

application programming interface (API) is a necessity not merely for a universally accessible EPG interface, but is imperative for the establishment of a multimedia home platform. DVB endeavours to create such a platform for the general goal of optimising interoperability of media content vis-à-vis receivers. In other words, the industry seeks such a platform aside from prospective concerns of providing parental choice mechanisms. As indicated in the above discussion, interoperability protocols provide a *minimum* technical requirement. Thus, different manufacturers and software designers will tailor or build upon these standards. The preceding establishment of standards may then be seen to have enabled the further investment of manufacturers and designers to build upon this industry-wide foundation.

At present and for the foreseeable future, parental choice delivery systems on this level are "free-riders" within the digital context. This is not to say, however, that cost does not play a tremendous role in shaping appropriate European policy.

7.1 The cost of providing programming related information in the digital era

The imposition of providing ratings, indeed, detailed ratings, from the standpoints of both producers and broadcasters would prove quite substantial in the approaching digital era. Further, requiring adequately sophisticated ratings and textual descriptions of content at a programme level, let alone at a scene-by-scene level as has been suggested by many,[53] will prove to be quite costly. The orientation to ratings that logically follows from the strategy of blocking harmful content would require a tremendous degree of oversight in order to achieve its aims. The ascription of ratings, in a monopoly ratings context, would prove to be a cumbersome and costly undertaking and would likely receive systemic resistance and evasion from producers and broadcasters alike.

It is well known that digital transmission provides the promise of 500 channels. Whether and from where producers provide the content for these channels is an open question. Residually, the prospect of mandating sufficiently sophisticated ratings, indeed rating and evaluation that would be of use to viewers and parents, for this

[53] The discussion of the implications of such policies for artist's rights is taken up in the following chapter.

volume of content is a near impossibility. Its social cost in terms of administrative machinery and escalation of cost to producers and broadcasters would be very dear.

In contradistinction to this negative approach to harmful content, the prospects of cultivating an affirmative, selective television environment for children presents strong structural inducements to the producers and broadcasters to both provide detailed and sophisticated information about ratings and, simultaneously, greater access to their content for third-party rating and information providers. In this positive environment, programming would be white-listed or selected by households as within the range of programming to be available to their children. This approach to children television viewing would signal a dramatic and desirable departure from the "channel-hopping" mode that currently predominates. Rather than moving from channel to channel as a form of television consumption in itself, the sensibility of intentional television watching may become the way in which children approach television. It is hard to advocate that "channel-hopping" provides any benefit to children's consumption of and exposure to television, especially in light of the sheer amount of time spent daily viewing television (see Figure 8). Instead, children's viewing habits, whether determined by their caretakers or parents, or self-directed by the child, should be specific in purpose and temporally delimited.

Figure 8: Children's viewing indicators - Average number of minutes per day spent by children with TV, Video and TV linked games machines, by age group**

Country	Television			Video			Games Console		
	9-10	12-13	15-16	9-10	12-13	15-16	9-10	12-13	15-16
Belgium*	95	105	115	14	21	20	11	19	14
Denmark	143	158	168	51	48	49	55	49	35
Finland	117	156	155	47	40	27	27	22	27
France	74	91	103	-	-	-	-	-	-
Germany	88	105	115	18	18	20	-	-	-
Italy	-	-	-	-	52	50	-	38	28
Netherlands	111	134	134	80	94	111	43	50	56
Spain	129	134	143	37	31	26	49	34	19
Sweden	114	140	145	40	45	46	38	26	26
UK	142	164	171	43	39	36	30	32	36
Average of above EU countries	102	120	126	35	41	41	27	28	25

Thus, as in the on-line environment, the information about and evaluation of television content would attain a high-value. Just as browsers are the gateway through which Internet users access on-line content, EPGs and related programming menus from a multiplicity of rating providers would provide the means by which parents would affirmatively attain programming for their children to view. Consequently, programming information and evaluation would be sought and selected based on the credibility of the information provider. For instance, a Catholic family in Ireland who is not so concerned about the programming broadcast from Ireland, but is concerned about some content coming from outside of Ireland, could refer to a programming menu put forward by the Archdiocese. Whether this menu is ultimately palatable or credible in the eyes of the individual family is a function of whether what appears on the television comports with that family's conception of what is desirable and appropriate. To continue the browser analogy, those who use the Internet select their browsers based on the quality, breadth and reliability of the array of web pages that are retrieved. Similarly, it should be expected that people would select programming menus based on similar criteria.

All of this is not to say that blocking information and capacity should not be available if this negative approach to protecting children from harmful content is desired.

Technically, the platform for providing information to facilitate positive strategies to programme selection would just as readily support the blocking strategy. However, as a matter of public policy, the most effective way to provide base-line protection to children is through selecting the universe of images and sounds to which they may be exposed. The blocking strategy is most appealing in the regard that it is a single decision that can function indefinitely: a rating level is selected, all programmes at or above this level are subsequently blocked. Intentional television, television that employs an affirmative strategy to protecting children, is more labour intensive. However, the fact that time may be spent on selecting channels, programmes and time-frames has two strong positive consequences: first, this creates a demand for information and selection systems that are easy to use and expedite the process of assessing the volume of programmes; second, this approach requires parents themselves to be more deliberate about what their children may watch. The degree to which parents create white-lists will vary; parents may select a number of channels, they may select channels but only within certain windows of time, they may identify a menu of individual programmes from which their children may select, they may select a menu designated by a cultural, religious, linguistic or other group.

At a policy level, the important implications are several: the process of describing and evaluating content will be plural, diffused, competitive, and thus better suited to the culturally variegated European Union; a positive strategy is the more viable way to provide protection of children from harmful content in a manner that is not overly restrictive; children will be acculturated to viewing television as an intentional activity, rather than using channel-hopping as a diversion or recreation in itself; the pressure of information and the environment in which programming is affirmatively selected will put a positive, and needed, pressure upon producers and broadcasters to firstly, increase the access of third-parties to their content, and secondly, provide more and better positive media for children.

7.2 The access to content problem

Attaining an adequate level of sophisticated rating and description, moreover facilitating plural providers of these services, is contingent upon third parties outside of the conventional monopoly rating providers gaining access to the content? In a

negative, blocking strategy approach, compulsion is the ultimate mechanism for providing access to third parties. As stated above, the volume of the content as well as the number of content providers and channels is serious impediments to the effectuation of the necessary environment for providing adequate coverage. In contrast, a positive, selection-centred approach applies economic inducements to not only greater responsiveness and breadth of coverage from the monopoly institutions, but the incentive to make programming content accessible to third party providers. Facilitating a market for the information about content and the ascent of "brand" recognition (e.g. UNICEF, the hypothetical Basque Cultural Authority, etc.) of content information providers will create incentives to allowing the greatest number of groups access to content for evaluation purposes.

Ultimately, both the negative and positive approaches will use the same information currency. The technical platform recommended here enables the conceptual platform for the provision of descriptive information about content from a multiplicity of sources with a multiplicity of standards using a shared information vocabulary or descriptive criteria. This descriptive information may mobilise blocking techniques equally as well as it may mobilise selecting techniques. The standardisation of the transmission of this information may universalise the access to this information. The shared rating information syntax between the digital and analogue transmission modes may allow for a seamless transition to the era of digital transmission dominance. The market forces that have already shaped the EPG industry will continue to intensify in Europe, providing serious competition for providing comprehensible, easy to use interfaces with the relevant information. The technical and rating environment may enable the parent to elect whether to block or to white-list. Both options will be available. Public policy encouraging and educating parents and caretakers on the importance of creating a household culture of intentional television viewing for their children may overcome the "channel-hopping" orientation. A clear policy enabling the positive approach to the harmful content question is the best way to foster the necessary incentives to providing plural and expansive coverage of content. It is the most viable way to address the concerns predicated on the ever-increasing volume of programming and the concomitant and serious concern about the nature of this content. If the usurpation of the process by purely commercial interests can be

avoided, this approach may be the strongest engine for creating the optimal European television environment for facilitating the protection of children from harmful content.

Chapter 2 - Rating Systems: comparative country analysis and recommendations

Introduction

At the core of every parental control mechanism lies its rating or labelling system. That system both identifies the appropriateness of media content for children and determines the means by which children's access to that content may be controlled. Rating systems define whether a programme can be shown within the watershed, how it should be encoded for a specific technical device, and what type of visual warning system should be used, etc. They should give sufficient information to empower parents to make efficient and deliberative decisions concerning children's access to media content. The challenge of every rating design is thus to develop a system complex enough to give relatively detailed information about a programme, but still simple enough for both labellers and parents to use.

In this chapter, we aim to furnish adequate data for analysing and evaluating the design of rating systems. We do not ultimately rate the rating systems. That cannot be fully done, since each rating system is the product of its own history, its own tradition, for example, of ratings in cinema, its own tradition of monopolistic public service broadcasting and transitions to private broadcasting, its own historical sense of government imposition of taste as a form of political censorship. Joel Federman has stated that "media ratings are not an ideal remedy for the social ills which may result from mass media content. However, there are ways to conceive rating systems which minimise their risks and maximise their usefulness". Ratings are often the product of industry fear of harsher measures, demanded by a public in the wake of a spectacular crisis, for example. But ratings can be used to empower consumers, giving them a greater ability to choose media content consistent with their personal tastes and values. Our survey may assist in enabling States better to design rating systems. As part of that process we examine the rating systems already applied in the European Member States to provide a firmer foundation for assessing them, and to identify what are perceived as best/worst practices. This data will also assist in determining where there

are similarities and differences, and which practices could be the basis for a European wide and/or cross-media rating system.

1. General Framework And Conclusions

In Chapter 1, the Study focused on the relationship of rating systems to technical devices. However, almost all television rating systems in Europe have developed in the absence of technical devices into which they may be integrated. Secondly, for the foreseeable future, most parents will use rating systems without the empowering characteristics of technical devices. In this chapter, we build on a study of rating systems throughout the Member States and across media.

Several interim conclusions can be drawn from our survey of practices as included in this Chapter:

a. Member States have highly differentiated approaches to the process of rating and labelling, and, moreover, regarding the information released and its design.
b. Very few of the approaches depend on the existence of empowering technical devices.
c. The rating and labelling systems of the Member States reflect their own internal media history and, to some extent, political history and social construct.
d. As a result, the foundation does not exist, at this point, for extensive harmonisation.
e. The primary function that the Commission and bodies at the European level can play at this stage in the development of rating and labelling systems is to encourage transparency, to provide information about the comparative experiences in various countries, to incite the sharing of experiences and practices via a European platform, and to deal with specific issues that affect transfrontier broadcasting.
f. At the present time, rating and labelling systems are not a significant barrier to transfrontier broadcasting, but there are signs that this may become the

case and the Commission should pay particular attention to this.

Within this complex evolution of Member State rating and labelling approaches, there are specific other issues which require European attention and for which action should be contemplated at the European level:

a. If plural, private descriptive approaches are to become more common in the digital era, and if pluralism in rating services is considered a public good, the Commission can facilitate this process. It can work to ensure greater access to programme information by third parties in a timely fashion. It can ensure that industry rating systems, together with Member State review, do not become a barrier to entry by third party rating providers.
b. Encouragement can be given to broadcasters as well as Teletext or EPG service providers to convey information prepared by third party rating providers (including information on technical devices where they are adapted to such ratings).
c. Efforts at the European level can monitor the relationship between use of rating and labelling systems and watershed and encryption measures.
d. Encouragement can be given to EU wide or co-ordinated media education and literacy campaigns (see Chapter 3).

1.1 Typology of rating systems

Since the introduction of rating systems as a vehicle for addressing concerns about violent and other potentially problematic media content, several systems have been designed and implemented (watershed, acoustic warning, visual icons or standard categorisation). In general, systems:

- are administered by State, industry (board or single enterprise), or third-party bodies (groups or individuals);
- are founded on either a specific methodology or an opaque judgement, and, finally;
- provide different sets of information and/or symbolic representations such as age thresholds, acoustic warning or visual icons.

Therefore, if rating systems as such are not so different and numerous, the

information they provide, the way this information is processed as well as its design can, and usually does, vary among countries, within countries, within a given medium and across media. This is especially true within Europe, as will be shown, where no common approach towards rating exists as such. Moreover, in some Member States, such as Spain, it has not even been possible to establish a common national classification system for TV. In others, such as the UK, an attempt to develop common principles has recently been made. All this makes it difficult to see how a European-wide classification system could be achieved. Evidently this divergence reflects significant cultural differences between and within countries, which are, nonetheless, subject to common directives regarding transfrontier broadcasting. Furthermore it reflects the different regulatory approaches taken to, for instance, broadcast media in comparison with cinema and video. This has always been justified on the basic grounds of the scarcity of airwaves, public service and the pervasiveness of the medium. This final rationale for different approaches to regulation is often cited in discussion of the protection of children or parental control. Media differ in terms of the kinds of blocking, selecting, and organising filters practically available to them. It is easier to block video cassettes, because cassettes are individual and separate units of consumption. They can be put on high shelves or locked behind counters in shops. It is also easier to control admission to cinemas. Therefore - as Balkin argues[1] - if broadcast media are special, they are special in this respect: Broadcast media offer limited practical means of filtering. How this will change with the arrival of new rating and filtering techniques remains to be seen. In what follows we try to create a typology of issues which will make the analysis between countries and media in the field of rating systems feasible.

Technical devices and rating systems

One obvious aspect of ratings history is that all existing rating systems were developed without the knowledge of the currently available technical devices for delivering them in an efficient and operative way. At the same time, most rating systems developed for television are derived from or related to rating systems established for earlier forms of media, predominantly cinema. It is in the history of cinema ratings that these issues

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[1] J. M. Balkin, "Media Filters and the V-Chip," in *The V-Chip Debate: Content Filtering From Television to the Internet,* ed.Monroe Price (Mahweh, New Jersey: Laurence Erlbaum, 1998), 59-90.

developed: should ratings be descriptive or evaluative; should there be specific criteria or should such standards emerge from a history of practice; can there be consistency and reliability. In film, as with its successor media, questions arose as to whether ratings should be determined by official or governmental bodies on the one hand or by self-regulation on the other. And in film, too, questions arose as to whether some films should be forbidden rather than subject to the discretion of parents, and whether watersheds or other mechanisms for filtering and creating dual markets could be established.

For films, as now for television ratings, the process must be efficient and operative to be useful. By efficient, we mean a rating system must provide a package that allows parents to act within the constraints and demands otherwise placed upon them; by operative, we mean a parental control signalling system that allows the pre-programming or blocking or filtering of a class of television broadcast through a technical device. In cinema, the item that was operative was the action of the box office or turnstile. An efficient rating indicated age appropriateness, such as barring those under 14. The equivalent to a technical device is the discretion of the gatekeeper.

What we have seen from the previous chapter is that the choice of technical device in the television setting can have a substantial effect on the kind of rating system that is feasible. In the analogue setting, for example, most Teletext based systems have limited capacity for the transfer of bits or bits per second. The pipe or pathway for information is extremely constrained. For a rating system to use these technologies, it needs to be strictly limited to a few criteria with something approximating an off-on choice for the recipient. These techniques are also most efficient where there is a unitary rating scheme, whether it is government originated or industry originated. On the other hand, if an indirect Electronic Programme Guide approach (NexTView) is employed, the programme-related information provided can be abundant and multi-sourced even in an analogue environment.

Similarly, if broadcasting is of a digital nature, then the possibilities for a rating system can be quite different.

With this in mind, we can now examine the existing models for rating systems using the typology developed herein.

Administration and organisation

Rating systems are in the first instance a product of an institutional framework. They can be deployed, issued and governed in four ways:

- State or governmental rating (usually via sub-entities, or regulatory bodies - e.g. France, Portugal)
- Industry rating (e.g. Film by FSK in Germany)
- Third-party rating (e.g. America On Line for all countries)
- Self rating (content providers e.g. video industry, Internet)

The composition and organisation of the rating provider will differ depending on its type:

- State rating is usually done by a body composed of departmental representatives, civil servants, professional representatives, experts in various fields (e.g. childhood development, law), and in some rare cases, children's representatives (e.g. cinema classification in France);
- An industry body is mainly composed of relevant professionals (e.g. French broadcasters have implemented rating boards that are generally composed of members of the staff, with the notable exception of M6's board, which is composed of mothers of children under 12);
- A third-party board is typically constituted by entities with a vested interest in the issue (industry, children's representatives, educators, consumers, etc.)
- Self-rating is carried out by the content provider (producer, video editor, Internet content provider).

One specific discernible trend within the broadcasting sector across countries is the further development of industry rating bodies. Broadcasters prefer to have full editorial independence including classification. Furthermore, we have identified a certain reluctance on the part of public and private broadcasters to co-operate with

each other in rating and labelling (Germany and Italy). This development differs from cinema and video regulation, where state rating is the most common approach, which is mainly a product of the historical evolution of rating systems. The on-line industry, however, relies exclusively on self-disclosure and third-party rating given the abundant amount of information and jurisdictional confusion. Moreover the European Union urged recently the adoption by Internet Service Providers of similar codes of conduct to ensure "systematic self-rating of content"[2]

It is clear that with the increasing flow of information, concerns exist that the shape of media consumption will increasingly be determined by those persons and organisations who administer the organisation, rating, and presentation of information for others. Delegating rating and filtering procedures to bureaucratic and rather monopolistic institutions, whether operated by government or by private industry can therefore have some serious drawbacks. Rating mechanisms are not neutral means of organisation and selection. They have important effects on what kinds of material are subsequently produced and how social arrangements are subsequently organised. The risks of governmental control are perceived as particularly serious, involving the potential politicisation of ratings, and the prospect that government ratings could be used as a springboard for further media content legislation. This fear is especially pronounced in some countries (Spain, Greece and Portugal) where ratings may be seen as similar to censorship experienced under dictatorial regimes. The dangers of an industry-run system are that the ratings classifications may be designed less with the goal of informing consumers than with the intention of minimising their economic impact on the industry, and that ratings may be implemented in ways that favour one dominant segment of the industry over others[3].

Isolating the ratings process from such political and economic influence is of paramount concern in many settings. A step in the appropriate direction is a decision-

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[2] See "Council Recommendation of 24 September 1998 on the development of the competitiveness of the European audio-visual and information services industry by promoting national frameworks aimed at achieving a comparable and effective level of protection of minors and human dignity, OJEC L 270 of 7 July 1998, p.48.

[3] Joel Federman, "Media Rating Systems: A Comparative Review" in *The V-Chip Debate: Content Filtering From Television to the Internet,* ed.Monroe Price (Mahweh, New Jersey: Laurence Erlbaum, 1998), 97 – 129.

making body whose board of directors is unconstrained by majority control by the industry being rated and completely independent of government. Such an organisation could involve a mix of individuals, representing constituencies relevant to the rating process, such as experts in child development and psychology, as well as parents and teachers. The gathering of such experts is a common pattern in the cinema environment but is nearly absent within the TV industry. These constituencies would certainly include the media industries in question, but they would not have majority representation on the board. Should the media industry gain majority representation, strong checks would need to be organised in order to prevent any untoward commercial or economical influence.

Some[4] have sought to avoid the problem of undue political or economic influence in the rating process by providing "self-disclosure ratings," such as those developed by the Recreational Software Advisory Council (RSAC) in the video industry in the US, which involves the creation of a standardised questionnaire. Another advantage of the self-disclosure approach is that it minimises the organisational structure necessary for the rating process. This would be particularly useful in a multi-channel environment, where the volume of programmes to be rated can exceed several thousand hours per day. Thus, shows can be rated by their producers, rather than by programmers or some centralised ratings entity.

A concern however with "self-disclosure rating" is the level of reliability of the rating providers. This can partly be solved via public scrutiny and transparency, to the extent that open access to a reliable system is guaranteed, then anyone should be able to check the label or rating given to any programme at any time. The idea underlying this requirement is that if it is easy for anyone in the public to raise questions or objections in those instances when they do not agree on the rating (using, of course, the same rating system), the threat of such checks keeps rating providers reliable. A "complaint reporting system" designed for viewers may then be organised together with, possibly,

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[4] DonaldF. Roberts, "Media Content Labelling Systems: Informational Advisories or Judgemental Restrictions?" in *The V-Chip Debate: Content Filtering From Television to the Internet,* ed.Monroe Price (Mahweh, New Jersey: Laurence Erlbaum, 1998), 157 –177.

a control exercised by the body in charge of broadcasting activities (either on a random basis, on content selected on its own initiative or on the basis of viewers' claims).

Furthermore, as developed in Chapter 1, the trend is toward a digital world, in which it is desirable to decentralise and enable other and more groups/spheres to administer rating systems. Family-values based groups may offer their own ratings system, employing their own conception of what is child-friendly and what is not. Consumers can then subscribe to the ratings system of their choice, much as they now subscribe to magazines. This will however largely depend upon the available space on television systems. Furthermore there may be economies of scale in producing a commercially viable ratings system. If so, then the number of ratings systems that survive will be quite small. But the more interesting prospect is that ratings systems can and will proliferate within the newer services. Consumers will be able to insulate themselves in increasingly specialised programming universes. By delegating their choices to specialised media rating companies, they can filter out the great mass of programming to focus narrowly on their own special interests. Some will see this as the ultimate vindication of autonomy, others will mourn the loss of a common televisual culture. In any case, this scenario produces a more plural and participatory model of parent empowerment and should be encouraged.

To conclude we recommend that during the transition period a system in which industry rating combined with third-party or self-disclosure rating develops in order to prepare and adapt the current institutional framework to the digital setting, where the current on-line model will prevail.

Classification

Classification forms the main methodology and basis for media ratings. The first issue to resolve when classifying content is how an assessment of the programme content will be made - will it be based upon specific criteria or an opaque judgement. The second question is what type of judgement one delivers on what type of content. The final issue is what type of information concerning the classified programme is disclosed to the audience, and in which format. Classification systems are to a certain

extent determined by the history of a family viewing policy in a certain country and in a certain medium.

Content Assessment

To make an assessment of the content, the rating body will in general apply a deterministic methodology, a non-deterministic methodology, or a combination of these two (semi-deterministic)[5]. A deterministic rating process is based upon some objective methodology in which the final rating is the result of following the methodology. A non-deterministic rating process is based upon the opinions of the rating body. A semi deterministic rating process is a combination of these two processes and is the most widely used. It is more or less based upon the case law of the rating body and corresponds with a so-called "common-law" approach.

Ex.1: The French Film classification system is based on the opinion of the members of the Classification Commission but refers, to some extent, to tendencies displayed by former members:

- 12+ = movies that might shock the sensitivity of children (horrible images, representation of traumatic relationship between parent and children...).

The perception of a horrible image or a traumatic relationship may vary from one commission to another (panel is renewed every two years) but the criteria exists.

Ex.2: The French public broadcaster, France 2, tried to make certain criteria objective. The broadcaster implemented guidelines containing some extremely rigorous principles to be applied in rating violent content. There is a *fiche* (or brief memorandum) drafted for each programme. These notes are drafted based upon formal criteria established on the basis of popular surveys conducted in order to assess audience perception and the effects of violent images. Each programme is classified according to these criteria by persons employed specifically to write these fiches. The *fiche* is then passed on to the internal commission, composed of 12 members, to evaluate the question of scheduling.

At the moment classification is mainly non-deterministic throughout broadcasting in Europe - apart from those used by France 2 and the FSK in Germany, there are no clear definitions of classification criteria. In cinema, a semi-deterministic approach is more developed (among half of the Member States) wherein content is classified based upon mainly written subjective criteria (either internally or legally defined) as well as case-law and precedents. The decision criteria are transparent to a certain extent but no consistency can be ensured. The same applies for video, as the body in charge of rating videos is, in most cases, the one also in charge of movie classification. On-line categories - such as those defined by the US based RSAC, used as basis for the UK IWF and the Italian IT-RA- are purely descriptive, this being mainly a result of the self-disclosing nature of the rating system. Nonetheless, an evaluative rating applies in Germany.

The consistency and reliability of the system used, be it deterministic or otherwise, is essential. A reliable system means that any two individuals using the coding procedures correctly will describe or rate a programme identically. It is clear that this requires concrete and detailed definitions of everything to be described or a clear overview of the precedents in place. The idea is that no matter how different the individuals, if they use the same objective definitions or apply the same case law correctly, they should assign the same labelling or rating to a programme.

If it appears - and there is little evidence that this is now the case - that distinctions in rating requirements impede cross-national trade in programming - efforts should be made towards co-operative approaches yielding more common standards and definitions. In this case the range of categories within the system must be sufficiently broad to allow users from different countries and cultures to be able to filter out the sorts of material that they are most concerned about. The creation of a European platform could be envisaged to bring together national content classifying bodies, as well as specialists, such as educators and psychologists, in order to share experiences and practice and, to the extent possible, work towards a common criteria.

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[5] C.D. Martin and J.M. Reagle, "An alternative to government regulation and censorship:content advisory systems for the Internet," *Cardozo Arts and Entertainment Law Journal*, 15, no. 2 (1997): 412.

Furthermore, as the analysis of the research literature has shown (see Annex 1 – Chapter 3), though many studies argue that the proliferation of violent depictions on television is in itself harmful, most researchers will acknowledge, to a greater or lesser extent, that other factors influence the degree of harmfulness produced. This offers a case for ratings systems that take into account the context in which violence is

portrayed, rather than judging a programme according to frequency of violent incidents. It also re-emphasises the need for media education, by which children learn the skills to de-construct programming so that content is less harmful.

To conclude, deterministic rating has our preference and recommendation because it is considered to be more reliable, transparent and consistent. Moreover in a digital setting, where plural third-party rating across countries will be more likely, a common set of definitions will be needed. Of course, non-deterministic rating gives more flexibility to a contextual assessment than is the case with deterministic rating and should therefore be considered as a complementary system. In fact, all depend on the situation and the environment in which rating bodies operate. A situation where rating providers act in a monopolistic or quasi-monopolistic environment should require a sufficiently sophisticated deterministic methodology so as to preserve equity of treatment for content providers and transparency of the rating decision for viewers. In a pluralistic environment this requirement is less relevant as existence of the rating providers will depend on their credibility, which derives directly from the confidence viewers and content providers may place in them.

Judgement

The question here is whether a content advisory should make an evaluative judgement about what a child should see, or should it provide descriptive information about the programme, allowing parents to make the evaluative judgements appropriate to their personal beliefs and value systems as well as to the maturity of their child? A broad distinction is therefore made between evaluative/judgmental versus descriptive/informational ratings. Descriptive ratings tend to focus on relaying information about media content, while evaluative ratings tend to make judgements about the appropriateness of media content for particular audiences. Some have referred to this distinction as one between "rating" and "labelling"[6]. The fundamental difference is one of providing information about content and allowing consumers to make decisions (good or bad) versus determining restrictions or prohibitions on

[6] Joel Federman, *Media Ratings, Design, Use and Consequences*, (California: Mediascope, 1996), 25.

potential consumers based on someone else's evaluation of the information and judgement about the capabilities and/or vulnerabilities of potential consumers.

Figure 1: Examples of Descriptive and Evaluative Ratings[7]

Descriptive Ratings	Evaluative Ratings
Contains Some Violence	Parental Discretion Advised
Nudity/Sex Level 3	Teen: Ages 13+
Violence: Blood and Gore	R: Restricted
Language: Mild Expletives	Adults Only
Contains Extreme Violence	Mature: Ages 17+
BN: Brief Nudity	PG: Parental Guidance

Currently a tendency towards a combination of evaluative/descriptive rating can be observed within the European broadcasting industry. Strong differences exist however among countries concerning the way information is represented. Moreover the descriptive information is rather limited and sometimes not sufficient to empower the parents in their decisions. Cinema and video rating is mainly judgmental with an emphasis on age descriptions, except for Greece, where a more informational approach is taken. On-line rating is mainly descriptive, apart from Germany where an age classification system is suggested.

The usefulness of the information depends on how clear, specific, and relevant it is to a given consumer. Assume, for example, that one wishes to avoid - or select - content depicting violent or sexual behaviour. In this case, a label explicitly describing the kind and amount of such behaviour and content is more helpful than content-free proscriptions that simply alert the viewer to the presence of problematic content but do not state its nature (e.g., TV-14). In other words, informational systems assume that the primary function of content advisories is to inform viewers about what to expect, and that the more fully they do this, the better. An informational system leaves to the viewer both the question of appropriateness and the selection decision.

[7] Ibid, 101.

Judgmental approaches - most film classification systems - generally do not provide much descriptive information. Rather, they make judgements about what is or is not appropriate for particular audiences - specifically, for different age-groups of children. Thus, a TV-14 rating tells consumers that somebody has judged that something about the content is inappropriate for children younger than 14, but says little or nothing about what that content is (e.g., violence, sex, inappropriate language, etc.). In the most extreme cases, such judgements become proscriptions. For example, in the U.S., youngsters under 17 years old are prohibited from attending an R-rated film unless accompanied by an adult. In other words, judgmental approaches hand over to someone other than the consumer the question of what is appropriate, and in some cases, the selection decision.

In short, several reasons can be given why descriptive ratings are preferable to evaluative ones[8];

- Evaluative ratings run a greater risk of having boomerang/backlash effects, as in the case of Channel 4 in the UK, which is the opposite effect than the one for which they are intended. By contrast, descriptive ratings, such as "This film contains some violence" or "This film contains extreme violence" have not been shown to have that effect.
- Evaluative ratings are less likely to be consistently applied than descriptive ratings. An evaluative rating system combines divergent dimensions of behaviour which requires that each rating decision includes a judgement of the relative importance to the rating of the sexual, violent, or language component in that media product. According to Joel Federman, such a process "individualises" rating decisions, which must then ultimately be made on an "I know it when I see it" basis. By contrast, informational ratings can be applied more uniformly, since the level of judgement is lower and simpler to apply.
- Because of their relative lack of consistency, evaluative ratings are less reliable as a source of information for those making media consumption choices. An Italian person living in the UK may have a different view on what level of nudity is allowed than the average UK citizen. In contrast, by providing specific content information, descriptive ratings allow these very different consumers to make

[8] Ibid, 102.

choices according to their values and preferences. This point is especially relevant to the implementation of technical devices. Using an evaluative rating system, content would be blocked according to the rating provider's decision about what is appropriate or inappropriate for particular audiences, rather than according to the specific values and tastes of individual consumers concerning sex, violence and language.

- Descriptive ratings are less likely than evaluative ones to be misused as representing a value system for society. All media ratings run the risk of assuming a moralistic tone, and ideas-or "unacceptable" portrayals of behaviour or attitudes-can be suppressed in ways more subtle than direct government intervention. This is of particular concern for television ratings, since television is currently perceived as the most pervasive and influential medium and evaluative television ratings run the risk of appearing to represent quasi-official values for the society as a whole.
- It is also worth mentioning that some studies (see Annex 1 – Chapter 3) have found that 'pro-social' programming, which imparts information and provokes discussion, has been found to change attitudes, particularly when reinforced by discussion. A descriptive approach would allow the consumer to select programmes of positive value.

In order to meet differing cultural requirements in different countries via a more common European approach, it is imperative - as mentioned above - that the descriptive label should offer an entirely objective description of the content, free of cultural values or legal references specific to a particular country.

In contrast, two rationales are offered for adopting a judgmental as opposed to an informational approach.

- Firstly, it is argued that given the thousands of hours of media content produced each year, there is no way to develop a descriptive system complex enough to identify the kinds of content differences that proponents of informational systems would like to describe, but still simple enough to be employed by whomever is charged with the task of labelling.
- Secondly, even if such an informational system could be developed, proponents of

judgmental systems say that it would be far too complex for most consumers to use. Rather, they argue, parents are more likely to use a system that only requires them to make a single, simple, age-based choice.

Clearly, informational content labelling systems are preferable to judgmental systems. There is, of course, the possibility of combining the two approaches - of both telling the consumer what is in the package and providing judgements about its age-appropriateness. But it is important to keep in mind that even though content advisories are intended to help parents monitor and guide their children's media consumption, we cannot lose sight of the fact that youngsters also see and respond to these ratings. Nor can we ignore the fact that content decisions are under the control of some children most of the time and of most children at least some of the time. It follows that how children respond to content advisories also warrants careful consideration. Indeed, as already mentioned, basic warnings or recommendations such as a red circle denoting erotic scenes, or the announcement of the unsuitability of the content for minors aged 15, is generally considered as having an attractive effect rather than a deterrent one. Substantially descriptive information would not present such high risks.

Another related question in designing ratings is of course what to label, i.e. what type of harmful content and what type of programming.

In general three content dimensions - violence, sex and language, are considered. However large differences across Member States exist concerning the relative importance of each dimension. The Nordic countries, for instance, are more tolerant towards sexually sensitive programming in comparison with the UK. Violence though is perceived in all European countries as equally harmful and is thus also the area in which a common European approach is most feasible. No real differences exist across media where cinema is generally used as the common denominator of the approaches.

Concerning the type of programming, pre-screening and the voluntary or mandatory character of rating plays an important role. First it is clear that, under the current

regime, programmes can be rated only if they can be reviewed beforehand. Therefore, programmes, such as news reports, that are generally not prepared well in advance and live performances, present difficulties. One reason for a preference for digital and pluralistic ratings is that the areas to be covered can be more varied and customised, and the relationship between electronic filtering and information concerning programme material can be more flexible in terms of time of interaction. There may not even be a moment of "review".

Warning system

The rating process culminates in its audience warning system. This has traditionally been based upon time (watershed), place (cinema versus home) and manner (visual/acoustic), and is usually linked to the method adopted by the rating body as described above. Classically, an age classification corresponds to the evaluative process while the issuing of a set of indicators corresponds to the descriptive system.

A programme can be preceded by a voice-over or visual parental warning system advising about rated content. Again several systems and icons have been developed across Europe in the television field (see section 2.5 of this Chapter). This may have serious drawbacks regarding the requirements of the new TV environment. Cinema, on-line and video almost exclusively use visual warning systems, whereas broadcasting may also use acoustic warnings as a complementary warning system. Furthermore the use of announcements at the start of television programmes is perceived more as "information" rather than constituting a "warning" in the accepted sense. European co-operation or co-ordination of on-screen icons should be considered to increase the acceptance of transfrontier distribution of European works, and thereby enhance the protection of children. But such a co-ordination will certainly present some limits due to the absence of consensus on the use of such warnings and, where used, the absence of common standards on their design and what they should represent.

Ratings and classifications may also be used to determine whether the programme can be scheduled before the watershed. From our study presented below it is clear that all countries have accepted and implemented the watershed with success. Some would

argue that with the arrival of technical devices, the watershed has lost its value and indeed, in some countries watershed rules have been revisited in order to take into account the specific characteristics of encoded TV services. We believe, however, that there should be continued emphasis on broadcaster responsibility, and attention should be given to use of watershed approaches (except Luxembourg) to minimise the consequences of harmful programming.

Warning systems may change significantly within the digital TV setting. As already stated and as it will be made clear in the following sections, descriptive information is the type to encourage. As to the representation of this information, the acoustic means presents certain drawbacks due to its nature (intervention of a human factor, short-lived location at the beginning of the programme) that will not permit it to challenge both the countless number of programmes to be delivered and the necessary selection to be exercised by the viewer. Visual icons may eventually respond to these requirements but can be expected to provide only basic representations of the content to be displayed (e.g. as to the intensity and quantity of detrimental scenes, as to their contextual justification) unless presented in a variety of forms which would overcome imprecision at the likely expense of confusing the viewer. A textual description of the content using and incorporating more or less standardised descriptive criteria and carried by the broadcaster or via EPG or Teletext services is preferred. Given the fact this may be excessively time-consuming for the viewer, a pre-selection function may be implemented by broadcasters or TV satellite operators[9] using key-words or standardised categories such as Action, Comedy, History, etc. in order for the viewer to pre-select an acceptable quantity of programmes prior to exercising his selection on the grounds of any potential set of content indicators.

[9] As has been already created by Canal Satellite in France or Vía Digital in Spain (see section 2.4).

2. Comparative Country and Media Analysis

Introduction

In this chapter, we provide an overview of the way rating systems are designed and carried out across media and in each Member State. Our goal is to demonstrate how the technological and policy alternatives manifest themselves, yielding a few noticeable patterns but remarkable differences within the Union. An understanding of how Member States have negotiated the past, with its own tumble of media technologies and challenges to taste, can provide a basis for suggesting the problems and opportunities for harmonisation in the future. Such a study provides guidance on how industry and public authorities involved in the rating process may respond to challenges emerging from the coming digital TV environment. We can assess whether the necessary regulatory culture and historical capacity exists to perform the new tasks implied. We can better assess whether state mechanisms will continue to evolve in their current environment, will shift dramatically or, as a consequence of changes in technology, become wholly redundant.

There could be many ways of presenting an existing picture of Member State rating systems. In the next chapter, for example, we provide what data exists, at this moment, on the efficacy or social efficiency of ratings. It might be suitable, though we do not do so, to study the impact of different rating systems, by country, on the production of creative material, industry by industry. We have organised the material in the following way: we look at rating systems by medium (film, video, broadcasting and internet) and, within those categories, by country of national origin. We pay special attention to a number of aspects that can be used to describe a rating system. These include:

- The administrative process of the classification
- The nature (evaluative/descriptive) and range of content information to be provided
- The standards that may guide the delivery and/or the substance of the information.

- The nature of the icons or audio and visual signals that represent the conclusion.

Using terminology adapted from other scholars, we can ask whether the methodology developed for the rating process is - in large - non-deterministic, semi-deterministic, or deterministic. The non deterministic approach means that the rating body provides the classification of the work based solely upon its opinion and does generally not rely on established criteria. The semi-deterministic methodology is more elaborate in the sense that the rating body, even if the decision is made based on its opinion, takes into account some principles and criteria that are more or less flexible. This methodology is particularly important in a European context as it permits us to identify whether or not a certain age group is viewed in the same way or differently in terms of its presupposed weakness and susceptibility to violence, sex or anti-social behaviour.

Presentation of this history and picture of the present has a specific purpose: We know that television is leaving its antiquated mass-media label further behind every day as it moves towards fragmented and variable content supplies, as well as relinquishing its purely broadcasting function to enter the interactive world. In consequence the passive relation of the viewer towards content will change (quantitatively – amount of content / qualitatively – selection of content) and, therefore, tools must be offered to the viewer to empower his new "active" status. Some elements of the solutions developed in the past for cinema or video or broadcasting may be instructive (such as those delaying with the mechanisms of decision-making) while other elements are not (such as those which are the result of the scarcity qualities of the medium). Our study of the background of ratings is designed to help us understand the needs of the digital future: the way in which the viewer, working with an avalanche of available content, must first identify and categorise the imagery and then act according to this identification. And the viewer may act not just for the purposes of self, but for organising the viewing of the family circle. The past, as we present it, is a complex set of lessons, largely inadequate, about how to inform the viewer about the proposed range of content in such a way as to permit him to navigate through it make his selection. The range of TV content available in the future will approximate the wide range of content offered on the Internet and that will present a sea change from the

past. Content selection solutions developed for the Internet are of particular relevance and significance for the new TV setting and, therefore, take their place in this study.

2.1 Cinema

Cinema may be viewed as the progenitor of the long history of ratings (though one could go beyond to books and to art itself) . The apparatus of rating films has been so complex and has evolved in such an intricate way that in some jurisdictions there is a comprehensive range of precise ideas about the type of scenes and behaviour deemed harmful for specific segments of the population (children, teenagers, persons of particular sensibilities). A mapping of each state's approaches to the influence of film images would provide an intriguing insight into how content is perceived in various parts of the Continent. But one immediately obvious fact is that conclusions are not always transparent and criteria, guidelines and principles now always so clearly articulated. What is obvious is the following: ratings and labelling systems have historically been media-specific; ratings and labelling systems have been local and distinctive in terms of structure and outcomes. It is possible that the evolution of the cinema rating system within a country is an indicator of the evolution of a system for other media, but that is not certain. And, finally, just as cinema itself is in the depository of different cultures, so are the ratings that accompany them. That may inform the way TV ratings are approached on a European level. Paradoxically, cinema rating systems are both *sui generis* and guides to the establishment of the systems for technologies that followed film.

At a time when self-regulation is most appealing, it is useful to note that the pattern for rating bodies in charge of film classification in the European Union is clearly one of strong ties to government, with the notable exception of the UK and Dutch system. This means that the rating body, is mandated and fully organised by law, ordinarily derives its power from the public authorities on which it is more or less dependent, that rating cinema works is a delegated task, and that generally the certificate is delivered on behalf of the Minister in charge of culture.

Figure 2: Cinema rating bodies

Jugendfilmkommission Province Advisory Board	State State	Voluntary[10] Voluntary
Commission intercommunautaire de contrôle des films	State	mandatory
Media Council for Children and Young People	State	mandatory
Valtion elokuvatarkastamo	State	mandatory
Centre National de la Cinématographie	State	mandatory
Freiwillige Selbstkontrolle der Filmwirtschaft	Industry	voluntary[11]
Cinematograph Commission	State	mandatory
Censor	State	mandatory
Censorship committee	State	mandatory
Commission de surveillance	State	mandatory
Nederlandse Filmkeuring	Third-party	voluntary[12]
Secretariado do Cinema e do Audiovisual Comissão de Classificação de Espectáculos	State Third-party	mandatory voluntary
Instituto de Cinematografía y Artes Audiovisuales Communidades Autónomas (Catalonia)	State Regional Authority	mandatory (either one or the other)
Statens biografbyrå	State	mandatory
British Board of Film Classification	Industry	mandatory

In Germany the distinction is complicated. While the *Freiwillige Selbstkontrolle der Filmwirtschaft* (**FSK**) is nominally an industry body, there is the right of the state "tutelary" authority to review the certificate issued by it. The FSK is a self-controlling body under private law which acts in the name and at the request of the Supreme Youth Authorities in the Federal States[13]. The Federal States are permitted to make diverging decisions and to impose them if they do not agree with a decision of the FSK. Notwithstanding this rating entity is a voluntary body, every film that will be shown publicly must be rated by the FSK. Without a rating, the film may only be shown to adults. The UK system does not follow the same scheme. The British Board of Film Classification is an independent, non-governmental body, which exercises authority over the cinemas, which by law belong exclusively to the local authorities. The Board was set up by the film industry in 1912 in order to bring a degree of uniformity to the standards of film censorship imposed by the many very disparate local authorities. The aim was to create a body which, with no greater power than that

[10] In the absence of a rating, the film may only be shown to children over 16 years.
[11] In the absence of a rating, the film may only be shown to adults.
[12] In the absence of a rating, the film may only be shown to children over 16 years.
[13] Its specific character is reflected by the wording of the certificate of release: "This film is released by the Supreme Youth Authorities in the Federal States according to *§6 JÖSchG of 25 February 1985* to be shown publicly to children and young people from the age of ... years".

of persuasion, would seek to make judgements which were acceptable nationally. Statutory powers remain with the local councils, who may overrule any of the Board's decisions on appeal. The Netherlands has also developed a regime, which bridges the line between dependence and independence: the *Nederlandse Filmkeuring* (**NFK**) is administratively independent from governmental authorities but members of this rating board are appointed by the Minister of Public Health, Welfare and Sports.

Cinema rating providers act in a monopolistic environment, with the exception of Germany, Portugal, Spain and Austria where two or more rating providers co-exist. In Germany the second rating provider is a more specialised Government entity, the BPjS, which is not a rating body as such, but is in charge of controlling the legality of cinema films and whether they should be put on the "index" and prohibited for minors. In Spain a competitive rating may be offered by any *Communidades Autónomas*, but so far only Catalonia has implemented such a regional rating entity and, in practice, the Director General of the ICAA rates nearly all films. Nonetheless a company owning the exploitation rights in a film, which has its headquarters in Catalonia, may choose whether to have the film rated by the Catalan Department for Cultural Affairs or by the ICAA, with the exception of films that may be classified as "X" films, which can only be rated by the ICAA. If a film is rated in Catalonia, the rating provided will be valid throughout Spain. It has to be noted that Portugal is unique in having a Catholic non-commercial entity, the *Secretariado do Cinema e do Audiovisual* (**SCA**), which rates all films and competes within the government rating body. Finally, In Austria, due to its Federal nature, there are governmental rating entities in each federal province. Ratings provided in one province are not automatically valid elsewhere. To render the system more unified, however, there is also the central *Jugendfilmkommission*, the Youth Film Commission, affiliated with the Federal Ministry for Education and the Arts, which provides ratings valid for each federal province.

In most States, film producers are mandated to submit their works to the rating entity. Three countries apply a voluntary system, namely Austria, Germany and the Netherlands. Two of these, Austria and the Netherlands, stipulate that showings of un-rated films will be restricted to persons of 16 years and over In Germany such films

may only be shown to adults. These are default ratings and producers have the opportunity to obtain a more favourable rating by submitting their works to the relevant classification agency.

However, even if applying a mandatory system, two countries have developed a singular system with the intention of overcoming difficulties that may be inherent to bureaucratic functions. Spain and Italy have established a specific procedure, by which if, in a certain given time[14], the classification body has not rated the work submitted, the rating may be proposed directly by the applicant.

A characteristic of European cinema ratings is that they are mainly evaluative and refer to a specific age under or above which a film is considered as suitable or unsuitable. Only Greece offers a descriptive classification[15] and the non-governmental Portuguese rating provider applies a semi-evaluative rating scheme (see below).

Certain age gradations seem to be common to most of the countries, namely 12, 16 and 18 (seven countries use 12 and 16 as break points while nine countries use age 18). Some important differences survive. In Belgium there is only one marker: 16 years of age. Italy does not follow the commonly agreed 12-16 gradation, which generally is thought to correspond to the beginning and end of adolescence , but uses "over 14" and "over 18". The same is true of Spain, which has only one teenage cut off, fixed at 13. Luxembourg does not recognise any limit over 17, but it does use an "over 14" rating. Apart from Spain, Italy and Luxembourg the countries that do not use a 16 year breakpoint have used 15 years of age as the point of demarcation, namely Denmark, Ireland, Sweden and United Kingdom.

While generally the first preoccupation is with controls on the distribution of imagery during adolescence, some of the countries nonetheless pay particular attention to childhood. This is the case in Austria, Germany and Portugal who have implemented a specific rating requiring that children must be older than 6 to be admitted to certain films. In Portugal there is even an "over 4" rating. For its part, Spain has deployed a

[14] In Spain, for instance, this period is one month.
[15] This descriptive classification has never really been implemented.

specific label, which recommends a film for children and fixes a seven years old threshold for some films. This rating is also used in Denmark and Sweden and is under consideration in the Netherlands. In the latter, the NFK would also like to introduce a "PG" classification to add to the "all ages" category, and an "all ages" rating accompanied with the label, child friendly/family film.

Figure 3: Age classifications

	All	6+	10+	12+	14+	16+	18+
	All	16+					
	All	All, but NR 7-	11+	15+			
	All	16+[17]	18+				
	All	12+	16+	18+	Complete prohibition		
	All	6+	12+	16+	18+		
	General	Under 12 if PG	12+	15+	18+		
	All	14+	18+	unsuitable for all			
	All	14+	17+				
	All	12+	16+				
	R4+	R6+	R12+	R16+	R18+		
	Specially R for children	For all	NR 7-	NR 13-	NR18-	"X" rated films[18]	
	All	7+	11+	15+			
	'U' (Universal)	PG	12 +	15 +	18 +	Restricted 18[19]	

R = recommended / NR = non recommended

As mentioned already, the rating scheme of the SCA in Portugal is of a semi-evaluative nature. As shown in the table below, there is no specification regarding suitable age,

[16] In accordance with the *Film Act of 12 March 1997*, age classification may be circumvented as it is permitted for children of the age of 7 and above to watch any film in the cinema, as long as the child is accompanied by an adult.
[17] Age categories 6, 8, 10, 12 and 14 may be used. There is also a PG-option "3 years younger may attend if accompanied by a parent (or legal guardian)". The following PG categories are possible: PG-8, PG-10, PG-12. See Finnish Board of Film Classification. Internet WWW page, at URL: http://www.vet.fi (version current at 12 December 1998.)
[18] Pornographic films and films that positively depict violence.
[19] To be supplied only in licensed sex shops to persons of not less than 18 years.

but a few generic categories ('all', 'adolescent' and 'adults') and a general assessment of the content.

Figure 4: SCA Rating System

'For all'	'For adolescents and adults'	'For adults'	'For adults only'
films that are entertaining and easy to understand	films that present a complexity that makes them hard to be understood by children, that may hurt their sensibility or distort their vision of the world	films that, due to their structure or content, may not be totally understood or adequately analysed by adolescents, films that contain problems which are not appropriate for individuals without full maturity and experience of life	films that present gravely distorted situations, due to their level of violence and/or degradation or exploitation of matters which may hurt the viewer's sensibility

Cinema ratings are usually non-deterministic or semi-deterministic, as outlined in the introduction to this chapter. The principles on which this semi-deterministic methodology relies are variable. First, criteria may be incorporated into law though this may have drawbacks. A 'rigid' approach to cinema contents may lead to the situation that the criteria expressed may not be sufficiently flexible to adapt to the evolution of cultural norms, or to take into account the various creative ways to depict sensitive issues, meaning that the context in which violence or sex appears in a film may affect the impact of the content. That is why these criteria are generally formulated in such a way that they are easily adaptable by the rating provider to each of these two requirements. This is the case in Denmark, Italy, Germany and Sweden. That is also why some countries (such as France and the UK), rather than legally defining what is suitable or what is not for a certain age, follow a kind of case-law approach, meaning that certain definable criteria such as full-frontal nudity, explicit sex and psychological violence are combined with more contextual approaches. This, if it does not offer complete security to the consumer and the content creator/producer, has at least the advantage of being more flexible and adaptable to certain contexts, contents and time.

Figure 5: Methodology

	Written subjective criteria
	Legal subjective criteria
Opinion of the panel	
	Case-law approach
	Legal subjective criteria
Simple pass or fail	
View of individual censor	
	Legal Subjective criteria
	Guidelines and classification forms
Moral judgement of the SCA	
	Written subjective criteria
Decision of the Director General	
	Legal subjective criteria
	Case-law approach

Even more interesting than the methodology itself are the transparency, where it exists, of the criteria on the grounds of which the content is assessed, and the methodology applied, as they permit a direct comparison of what is considered harmful in the various European countries, and for which each age category. Transparency mainly depends on the methodology adopted. In other words, with rare exceptions, sophisticated case-law approaches or legal frameworks are a necessary characteristic of a transparent methodology.

Figure 6: Comparison of the rating criteria (when transparent)

	sexual-deviation and pornography (18)	Representation of violence (18)		incitement to racial hatred, glorification or playing down the consumption of drugs (18)	glorification of the Nazi ideology glorification of war (18)
	Sexual description (with graduation for children under 7, 11 and 15)	Brutalising effect, namely by weakening inhibition towards use of violence			
	Quantity and quality of sex determine the age suitability Hard core pornography (18) Sexual violence, animal pornography or child pornography (ban)	Quantity and quality of violence determine the age suitability Depiction of fictional graphic or sadistic violence (18) Brutal violence (ban)			Obscenity, Psychologically disturbing (ban)
	Pornography (18) pornographic films with children films depicting sexual relations between humans and animal (ban).	horrible images, traumatic relations between parents and children, excessive violence (12)		positive images of suicide, drugs,etc (16) positive images and glorification of violence inciting viewer (positive images of crime, terrorism, etc...) (18)	
	represent erotic scenes (14/18)	violent scenes against human beings or animals, hypnotic phenomena or shocking surgical operations (14/18)	vulgar content (14/18)	excite immoral behaviour, use of drugs, promote hatred and revenge, induce to imitation of crimes or suicide (14/18)	obscene or against public morality (18)

	excessively explore sexuality (16) pornography (18)	psychological trauma (12) excessively explore physical and/or psychological violence (16) explore pathologic forms of physical and psychological violence (18)			excessive fatigue
	pornography	frightening scenes, brutalizing violence horrible, impudent, sadistic		risk of excessive identification, racism, sexism, discrimination, alcohol or drug use	intimidation, field of tension without possibilities to escape, bad ending/open ending, fascism, political extremism
	depicts sexual violence or coercion or present children in pornographic situations	brutalising effect, explicit or protracted scenes of severe violence to people or animals			emotional shock, cause psychological damage
	occasional brief non-sexual nudity bed scenes but no serious suggestion of actual sexual activity (PG), implications of sex (12), full-frontal nudity in a non-sexual context, impressionistic sex (15), complex sexual relationships explicit simulated sex, full nudity in a sexual context (18)	mild violence (PG) more realistic violence limited in length and intensity (12), mildly graphic violence and horror with some gore (15), no details of harmful or criminal techniques (PG/12/15), graphic violence, provided that it does not encourage sadistic pleasure or glamorise dangerous weapons (18)	limited scatological language but no sexual expletives (PG), stronger language, but only a rare sexual expletive (12), more extensive use of expletives (15), frequent use of sexual expletives (18)	no drug use or condoning of immoral behaviour unless mitigated by context (PG/12), no undue emphasis on weapons (PG), soft drugs may be seen in use, but not so as to condone or normalise (15), unglamorised use of hard drugs when justified by characterisation or narrative (18)	controversial religious subjects (18)

These criteria are more or less precise according to the country considered. For example, the Portuguese rating entity refers to general assumptions such as psychological trauma or excessive exploration of sexuality which can lead to numerous and variable interpretations. The same applies in Italy where erotic and violent scenes cited without being subject to more detailed explanation, which would permit identification of certain degrees of eroticism or violence. The French film board classification provides a generic approach to content (shocking work, incitement to dangerous behaviour, incitement to violence), but accompanies these criteria by more detailed categories or definitions (particularly horrific images, those that glorify suicide, drugs or terrorism). Criteria are more specific in the Netherlands and the United Kingdom.

Some common concerns may be observed from the criteria used, such as excessive violence, which uniformly entails age restrictions and may not be seen by anyone younger than 12. Another general concern is the influence that a film's depictions may have on children and teenagers inciting them to immoral and/or antisocial behaviour (drug use, incitement to suicide, hatred,...)

Other particularities can be observed. In the UK, sex/nudity related content appears with very sophisticated gradations in each of the categories (except suitable for all), which denotes the particular attention that is paid to the contact that minors may have with this aspect of life, and leads to tight controls on graduated admission of minors to films with this kind of content. This concern is not expressed in such a detailed way, nor regulated so carefully in the other countries, and, indeed, in some of them sex is not even perceived as detrimental for minors. This assumption is generally made when considering the Nordic countries, which express more concern regarding violence.[20] The European Commission itself recognised that "there is a wide gap between the Nordic countries, which are tough on violent material but easy-going where sexually explicit material is concerned and the Latin countries, tough on sex but less so on

[20] It is worth noting that the film "*Sex, Lies and Videotape*" was rated 18+ in UK while it obtained a 7+ certificate in Sweden and would have even been released within a general audience certificate if it had not contained a violent scene.

violence"[21]. The UK rating system is in fact rather more sophisticated than any of the others presented above. The full range of precise content criteria might imply more or less automatic classification in such or such a category. Nonetheless, the BBFC's view is that context, treatment and the intention of the film-maker are as important as the actual images shown. Virtually any theme is acceptable if the treatment is responsible, and the same images may be acceptable in one context but not in another.

In addition to the fact that a classification may be decided by one entity for the entire population on the grounds of criteria more or less univocally decreed, the question arises of whether or not these rating decisions are mandatory and must be respected both by those responsible for the cinema houses and parents, or whether the classification is perceived as a mere recommendation made by a specialised body in order to give some limited guidance to the audience, who, in this case, may make their own decision as to a film's suitability. The issue is of importance as it may highlight differences regarding the freedom of viewers and social responsibility. Indeed, two distinct approaches appear within the countries treated here, which deserve special attention due to the existence of specific historical factors. That Spain, Portugal and Greece were dictatorial regimes for several decades has led to the fact that citizens may be more resistant to any kind of mandatory regulations regarding their behaviour, especially in the cultural sphere. This is one explanation of why the ratings issued by the bodies in charge of classifying film in these countries only recommend and do not prohibit. In all the other countries the rating issued is binding[22], meaning that the whole industry must respect it and, more particularly, that the management and staff of theatres may be held responsible for allowing minors to view a film prohibited for their age group.

2.2 Video

Since films are the dominant subject of videos, it is not surprising that video and cinema ratings have a strong relationship. One could distinguish between them in terms of the impact of the large screen and the small one, or that there is the

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[21] Commission of the European Communities,*Green Paper on the Protection of Minors and Human Dignity in Audiovisual and Information Services*, COM(96) 483 final, annex 3.II.

gatekeeper of the movie house as opposed to the gatekeeper of the video store, or even that the impact and context of the home is different from that of the public theater. Still, it is not a surprise to find that in most cases, the body responsible for the classification of films is also the one that rates videos, applying to this alternative medium the same procedure, the same criteria and issuing the same type of rating (see Figure 10). This is the case in Germany, where the body authorised to rate video films is the FSK, which applies the same procedures as for film. This is also the regime applied in Denmark, Portugal, Spain, Ireland, Sweden, Finland and United Kingdom.

However, in the UK, a new classification has been especially created for video, the 'Uc' label, emphasising the particular suitability of a given work for a young audience. In contrast, in Spain, two categories of cinema ratings have disappeared for video, namely the "specially recommended for children" and the "not recommended for under 7's" labels. In Finland the 18+ rating has also disappeared, with just the 16+ age limit remaining. A film rated 18+ or that would have been rated 18+ is banned for video distribution.

Videos either based on a cinematographic work or originally created for video are rated as for a film, using the same criteria, following the same methodology and procedure, and granting the same graduated ratings. Moreover, generally the rating given for the cinema is re-applied to the video version.

However, it must be noted that this is not the case in all the Member States. First of all, two countries do not apply any rating system to video. This is the case in Austria and Luxembourg. In Greece, the film regime is supposed to be applied to video but, the system has not really been implemented as yet.

Second, in Sweden, while ratings are compulsory for cinema films, they become voluntary for video. The video distributors assign ratings to their products with the exception of films containing depictions of realistic violence that are for hire or sale to children under 15 years. The ratings to be displayed on video packaging remains the

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[22] The UK rating, strictly speaking, is not mandatory, as it can be removed by the local authorities who are officially in charge of classification. *Cinemas Act 1985.*

same (All, 7+, 11+, and 15+). A system of voluntary examination by the classification board has been implemented, whereby charges can be brought against films that have not been previously examined where video films containing unlawful violence have been offered for hire or sale. [23] Charges cannot be brought in the case of films that have previously been approved by the Board.

Finally, in France, a clear distinction is made between the two possible origins of video products, which has some consequences for their system. Video products originating from the cinema have to carry the certificate issued by the film classification commission. Original video works escape this procedure and adopt a voluntary scheme regulated by a Code of Ethics enacted by the *Syndicat de l'Edition Vidéo* in 1995. This code requires the editor to display a warning when he considers that the work contains shocking scenes likely to harm the sensitivity of the consumer. The classification is issued directly by the different video editors. It is not a visual symbol system but only a display of information/recommendations. This is due to the fact that editors think they do not have the legal legitimacy to act as censor. There are no guidelines and no precise or harmonised criteria. For non-cinematographic works the *Syndicat* refers to the classification system of the *Conseil supérieur de l'audiovisuel* (**CSA**) for TV programmes. It is interesting to note that the same medium will thus refer to the cinema system for some of its products and the TV system for others.

In the Netherlands too, text must be displayed on the cover (in addition to the age rating), categorising the video (Child and Youth, Family, Drama/Classic, Humor, Sports, Music, Educational, Science Fiction, Action adventure, War, Western, Thriller/Crime, Horror, Racy Humor, Erotic and Porn) and giving an accurate impression of the content of the video.

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[23] Depiction of sexual violence or coercion or explicit or protracted severe violence to people or animals (Penal Code, chapter 16, section 10).

Figure 7: Video ratings (source: International Video federation, Country reports – PCMLP)

	Ø	All 12 (12+) 16 (16+)	A (All ages) T.f.A (7+) T.O.11 (11+) T.O.15 (15+)	G (general) Restricted for persons under 16 Banned	All 12 (12+) 16 (16+) X (18+) Recommendations (if purely video work)
	Ø	3	4	3	4
	Ø	Voluntary	Law24	Law25	Law26/Voluntary 27
	Ø	Packaging & cassette	Packaging		Packaging & cassette
	Ø		Media Council for Children and Young People	Valtion elokuvatarkas tamo28	Cinematographic works - CNC
	White (All ages) Yellow (6+) Green (12+) Blue (16+) Red (18+)		R All R PG R 12+ R 15+ R 18+	For All Under 14 (14+) Under 18 (18+)	Ø
	5		5	3	Ø
	Law		Law	Mandatory	Ø
	Packaging & cassette		Packaging	Packaging	Ø
	Freiwillige Selbstkon-trolle der Filmwirtshaft		Official Censor of Films	Censorship Committees	Ø

[24] MCCY was established by the Minister of Culture in April 1997. Chapter 6 of the *Film Act of 12 March 1997* establishes the legal setting, outlining the Council's mandate. Simultaneously the State Film censorship was closed down. MCCYs activity is regulated by the Departmental Order No. 30 of 16 January 1998.

[25] Act on the Classification of Video and Other Audiovisual Programmes - 1987.

[26] *Décret du 23 February 1990 pris pour l'application des articles 19 à 22 du code de l'industrie cinématographique et relatif à la classification des œuvres cinématographiques* (title II, article 5, al. 3) mandates the editors of video tapes to display on the tape's cover the certificate delivered by the classification commission of films.

[27] Code of ethics approved on 25 March 1995, Article 6. This concerns only purely video products. Producers have to display information regarding the content when they consider it as potentially harmful.

[28] Finnish Board of Film Classification.

	R4 R6 R12 R16 R18	AL (All ages) PG 12 (12+) 16 (16+)	R All R 13+ R 18+ X	All audiences 7 (7+) 11 (11+) 15 (15+)	Uc (All,+children) U (All ages) PG 12 (12+) 15 (15+) 18 (18+) R18 (restrict 18+)
	5	3	4	429	7
	Law	Voluntary	Law	Voluntary30	Law
		Packaging & cassette31	Packaging & cassette	Packaging	Packaging & cassette
	Comissão de Classificaçã o de Espectá-culos	Raad van Toezicht Videovoorlicht ing; RvtV32	ICAA - Comisión de Calificación de Películas Cinemato-gráficas	National Board of Film Censors	British Board of Film classification

2.3 On-line services

As to the Internet, rating solutions are far from being the norm in Europe. Thus far only three states have developed a true rating system, namely Germany, the UK and Italy. Rating solutions used for Internet content are of direct relevance for the purpose of this study since, as stated above, it is very likely that the amount of TV content available in the future will be similar to the wide range of contents offered on the internet. Therefore content rating solutions developed for the Internet are of particular significance for the new TV setting. However, these three cases highlight the fact that both rating options – evaluative or descriptive – may be used.

In Germany the entity in charge of software classification is also authorised to rate Internet content. This is the *Unterhaltungssoftware Selbstkontrolle* (**USK**), the

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[29] In addition, some times, the distributor also use the category "from 18 years".
[30] The video distributor assigns, on his own, an age category. This is voluntary with the exception of films containing depictions of realistic violence that are for hire or sale to children under 15 years as well as of films showing at a public gathering or entertainment.
[31] Voluntary video industry supervisory board under the charge of NVPI (*Nederlandse Vereniging van Producenten en Importeurs van beeld- en geluidsdragers* – The Dutch Federation of Producers and Importers of image and sound carriers); new self-regulating system for all audio-visual media to enter into force in 2000 (see Annex 2 – section 5).
[32] Voluntary video industry supervisory Board.

Entertainment Software Self-Regulation Body.[33] The USK has supervised network contents and on-line games since 22 August 1997. To this end it applies the same procedure as the one used for software. It refers to the age categories included in the relevant legal provisions and has developed objective points for the age classification of computer and video games that are also of use for internet content[34]. For instance, a game is always said to contain gratuitous violence if the player is placed in the role of the killer, if the death of opponents is rewarded, if the idea of the game is exclusively to allow aggressive behaviour, as well as if the effects of violence are clearly shown. However, the decision regarding the ratings is based on the opinions of the examination committee on the basis of these criteria. It could be said that the system employs a a semi-deterministic methodology.

In principle, the USK exerts a voluntary control. The aim of the USK is to guarantee the protection of minors by means of voluntary self-regulation on the part of the suppliers, even before the publication of products. By awarding its ratings the USK is ensuring that a given software is suitable for distribution and complies with the legal provisions regarding the protection of minors. The USK only acts on request of content providers[35]. The suppliers and manufacturers as well as the information and communication service providers which are members of the Association of Entertainment Software in Germany (VUD[36]) recognise the USK as their self-regulation body for the software available for purchase and other public use. The association is supported by the association for the Support of Young People and Social Work.

As to its structure, the USK is composed of an Advisory Council (*Beirat*), which is the policy-making and controlling body of the USK, and of expert examiners. The

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[33] The USK was created on 1 October 1994.
[34] These criteria have been developed on the basis of the provisions of 31 GjSM-*Gesetz über die Verbreitung Jugendgefährdender Schriften und Medieninhalte* (law on the dissemination of publications and other media moraly harnful to youth) and are very similar to them.
[35] However, German department stores have decided to sell only video and computer games which have been controlled by the USK.
[36] The VUD is composed of developers, distributors, licensees from the entertainment, information and educational software industry, such as Acclaim Entertainment GmbH, ACTIVISION, ak tronic Software and Services, ART DEPARTMENT GmbH, BLUE BYTE Software GmbH etc. The members do not rate their products themselves but give them to VUD, which passes them to the USK to be rated.

Advisory Council is made up of members of various groups of society e.g. in the field of science, politics, culture, protection of minors.

The expert examiners must not be active in the computer hardware or software industry. They are independent and their function is honorary. They are only reimbursed for their expenses. They are obliged to attend the advanced training events organised by the USK. These relate to evaluations and examining activities and also advanced training on selected areas of assessment of computer and video games. The experts are selected on the basis of their professional experience and training.

The USK in principle examines all the contents submitted regarding its content and permissibility.

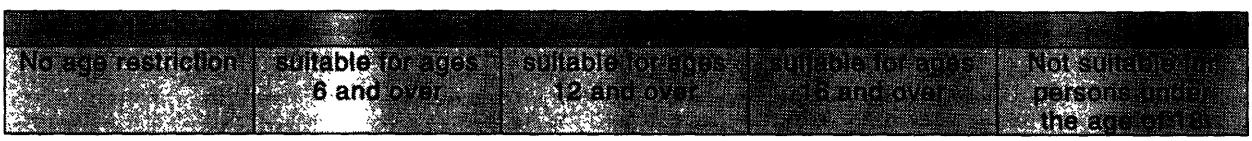
The USK controls:

- - whether the content is compatible with the provisions of the Criminal Code[37]
- - which age classification should be assigned to it.

and then delivers a report to the content or service provider.

The USK awards age classifications (evaluative rating) for the following levels[38]:

Figure 8: The USK Rating System



[37] §86a, 130, 131, 184 (3) of *Strafgesetzbuch-StGB* (Criminal Code).

The USK's assessment is displayed on the product by means of stickers. There is no legal obligation relating specifically to the USK rating. However, the relevant general legal provisions regarding rating are complied with by the USK, partly because of the fear of bad publicity following the attribution of an inappropriate rating. This prevents voluntary self-control organisations acting in the interests of the companies financing them. The ratings of the USK are not binding in the legal sense, but are only consumer information.

The USK's rating capacity is limited because of the size of the organisation. Only 5 people are employed, and there are 27 experts and 7 observers. So far they have received requests from 195 organisations from 6 countries. As to the solution deployed in Spain for the classification of videos, the USK guarantees that an examination will take place no later than 21 days from application for a rating, and the applicant is informed of the results by fax.

The USK is a national system, but the fact that Germany is, in the field of entertainment software, the second biggest market after the USA motivates foreign firms to participate in this voluntary self-control organisation.

The USK requests fees for the examination of web-sites
300 DM for a maximum of 25 pages
500 DM for a maximum of 75 pages
750 DM for a maximum of 100 pages
1000 DM for a number of pages exceeding the limit of 100.

In Italy the solution deployed is also non governmental. The collaboration between the Information Science Degree Course of the University of Cesena (who prepared the operating environment) and the *Association Cittá Invisibile* (who defined the rating system) has recently given birth to a pilot Italian rating agency: IT-RA[39].

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[38] The USK maintains that the age groups categories should be updated. However, they regret that current theories regarding psychological development have not been studied in a sufficiently scientific manner on the basis of the computer game practices of children and young people.

The IT-RA rating system is evaluative and voluntary. IT-RA is a PICS[40] rating agency: it grants PICS labels to content providers who autonomously rate their documents by completing application form available on-line. Figure 13 below reproduces the IT-RA descriptive criteria. Based on the level of content as rated by the content providers, IT-RA issues the relevant PICS label (metadata), which is then associated with the internet content. When access to the document is sought the software browser reads the level of each category and blocks access when the level is higher than the one selected by the user. The IT-RA system applies to advertising as well.

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[39] Corso di Laurea. WWW page: <http://www.csr.unibo.it/>
[40] Platform for internet Content Selection (PICS) is a system elaborated within the Word Wide Web Consortium (W3C). http://www.w3.org.

Figure 9: IT-RA Rating System

Content Category	Level 0	Level 1	Level 2	Level 3	Level 4
Violence	No express or implied violence	Materials denouncing violation of human rights - not harmful to minors	Implicitly violent	Expressly violent	Inducing or inciting to violence
Sex	No references to sex	Scientific material on sex and sexuality - not harmful to minors	Alluding or relating to erotica	Moderately sexual and non explicit	Sexually explicit and pornographic
Language	No vulgarity	Materials on the use and diffusion of dialects - not harmful to minors	From time to time vulgar or dirty	Vulgar and/or blasphemous	Verbally violent
Advertising	No advertising	Advertising but not harmful to minors	Also advertising products for minors	Subliminal advertising contents	Prevailing and express advertising contents
Religion	No references to religion	Material on religion	References to a particular religion	Proselitical religious references	Religious or non religious intolerance
Political issues	Non political	Material on politics - non harmful to minors	Generic political references	References to political associations	References to political parties
Racism	No racial references	Racial material – non harmful to minors	Subliminal racial references	Explicit racial references	Inciting to racial hatred
Didactic	Highly didactic and based on accurate scientific materials appropriate for minors	Highly didactic and based on accurate scientific materials appropriate for adults	Medium didactic with good scientific basis	Low didactic with poor scientific basis	Non didactic

The United Kingdom has also opted for self-regulation. An independent organisation, the Internet Watch Foundation (IWF), was created in April 1997 to implement the proposals jointly agreed by the Government, the police and the two major UK service provider trade associations, ISPA and LINX. It is funded by the UK industry on a subscription basis and is controlled by a Management Board drawn from the subscribers and a Policy Board drawn from a wide range of stakeholders in the Internet including industry, child and education, consumer, libertarian and other media

organisations.

The principle is the same as for the IT-RA system. The provider rates its own content according to the range of categories provided by the IWF. It is a descriptive system[41], developed in close co-ordination with the one created by the Recreational Software Advisory Council (RSACi)[42]. It contains 10, more or less detailed, categories.

Figure 10: IWF Rating System

1. Nudity
2. Sex

Level	Erotica	Sexual Education
0	No reference	No reference
1	Romance/Affection	Emotional/relationship issues (with no explicit sexual content)
2	Passion	Adolescent/emotional issues with sexual content: puberty/periods etc.
3	Groping/touching (erogenous), clothed/unclothed	Sexual relations (hetero/homo)
4	Other (not covered above): masturbation, intercourse, sexual violence, deviance.	Other sexual matters: sado-masochism, etc.

3. Language
4. Violence
5. Personal Details

0	Not requested ('Nothing of relevance')
1	Non-verifiable or default (e.g. e-mail address)
2	Verifiable detail (e.g. name and address)
3	Financial detail (e.g. credit check-style detail)

6. Financial Transactions

0	Nothing of relevance
1	Expenditure from a pre-agreed fixed ceiling account (i.e. already committed)
2	Direct expenditure from bank, credit card, etc. (i.e. real money)

7. Tolerance

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[41] To assist users in their choices, IWF also recommend that 'off-the-shelf' profiles be introduced so that a familiar classification of content, such as the equivalent of a film certificate rating, can be chosen.
[42] Recreational Software on the Internet. WWW page: <http://www.rsac.org/homepage.asp>.

None of these (ie no relevance to this category)
Neutral (non-prejudicial) reference to groups or attitudes to them
Reference to a group or groups which imply or assert a degree of inferiority or superiority by virtue of real or imagined membership
Maligns or deprecates one group and/or advocates discriminatory treatment of its members (not including physical harm or violence)
Advocates action which would cause physical, psychological or economic harm or violence against the group

8. Potentially Harmful Subjects

No reference to potentially dangerous subjects
Reference without promotion or advocacy
Promotion of, or instructions about any activity which is normally considered safe for children only if supervised by an adult (e.g. water sports)
Promotion of, or instructions about, any activity not considered safe or advisable for children and/or which can be harmful to adults (e.g. smoking, consuming alcohol)
Promotion of, or instructions about, any activity which has a reasonable possibility of leading to serious injury or death (e.g. suicide advice)

9. Adult Themes

10. Context Variables

2.4 Television

As to television-based rating solutions developed to date the principal conclusion that emerges from the data is that there is no single approach among the Member States and no approach that seems to serve as the basis for a harmonisation or unification of rating systems. Some of the countries have opted for extremely elaborate procedures, such as France, while others have not implemented any specific systems, such as Luxembourg.

The method by which a rating system has been implemented might be important in terms of its operation and this, too, varies from country to country . In some Member States labelling systems are required by law. In Spain rating TV content is mandated by law either at a national or regional level, as the *Communidades regionales* have authority to implement their own rating system (as for cinema), but to date Catalonia is the only region to have done so. Law plays an important defining role in Austria, Denmark, Finland, The Netherlands, Sweden and Italy (in conjunction with the implementation of a code of conduct). In Belgium, because of its constitutional situation (federal structure encompassing the three Flemish, French and German linguistic communities) the legal structure provides that solutions deployed concerning rating modes varies

from one Community to another. While the French community is in the process of adopting a visual signalling system, the Flemish Community has opted for an acoustic warning solution and the German Community has not yet implemented any regime.

In some other countries legal provisions have addressed the protection of minors but leave the door open to self-regulatory initiatives. This is the case in France, where there is no mandatory provision regarding the introduction of a specific rating system, but rather a requirement, in general terms, for the *Conseil Supérieur de l'Audiovisuel* to oversee the protection of minors. In consequence, a labelling system was implemented in 1996 by the terrestrial broadcasters under the initiative of the CSA[43]. The regime adopted was therefore introduced into the licences of the broadcasters concerned.[44] The same process was followed in Portugal, where the *Alta Autoridad para a Comunicação* came to an agreement within the broadcasters.[45] In Germany the system was implemented under the sole initiative of the private broadcasters, with public service broadcasters separating themselves and relying on their own "in- house" system.

Cultural differences are extremely evident in this domain, similar to the cinema rating distinctions. In Spain, Greece or Portugal, the dictatorial regimes' legacy may have created certain resistance within the population to state influence on behaviour, especially where cultural choices are involved. The same reluctance applies to content providers, who are not so enthusiastic about implementation of parental control mechanisms. In these States, where content regulation is implemented, it is done so in a free and competitive way (see for instance Spain - below). There are cultural determinants of ratings, of course, other than the hand of an oppressive past. In Ireland, for example, some Catholic pressure groups oppose labelling systems to alert the public if they authorise an infringement of the "social contract" not to broadcast detrimental programmes. As a consequence, broadcasters act as self-censors and refuse

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[43] This system was recently reviewed, giving birth to a new visual icons regime, implemented in September 1998.
[44] Primarly addressing TF1, France 2, France 3, Canal + and M6, the visual warning system was introduced in the licences of RFO, La Cinquième, Canal Antilles, Canal Calédonie, Canal Réunion, Canal Polynésie and Canal Guyane. for RFO (Official Journal no 44 of 21 february 1998 and Official Journal no. 278 of 1 December 1998).
[45] Agreement signed on 9 July 1997.

to broadcast any kind of material that might endanger the audience, and consequently, their own image.

Because of these cultural and historic differences, because of differences in the legal and structural origins of television rating systems, there are significant differences in the way they have evolved in the different European Member States. One common point is that most of the countries (except Luxembourg) have developed watershed rules and time-scheduling corresponding to these rules are mostly identical, with the second half of the evening (beginning between 9pm and 10.30pm) is perceived as the limit before which detrimental content for minors is generally prohibited. Furthermore, the watershed is the only system in use in Germany.

Figure 11: Watershed Systems

	- Before 20.15 programmes must be family-friendly - Cinema works rated 16+ or more have to be broadcast after 22.00
	- Fiction works which due to number of scenes or to their atmosphere are likely to harm sensitivity of minors under 12: when broadcast before 22.00 - icon to appear throughout programme (including credits) for unencrypted channels and for one minute at the beginning of the broadcast for encrypted channels (including credits). When broadcast after 22.00 icon to appear for 1 minute at the beginning of the broadcast (including credits and for 15 seconds after each break. - Works with erotic character or intense violence: icon to appear throughout programme (including credits) whatever the broadcasting time (prior to or after 22.00)
	- An informal watershed of 21.00 is used by the Public Service Television Danmarks Radio, and there is also a standard provision for all broadcasters that those programmes which are considered harmful to minors can only be shown after 24.00. - Watershed is even not necessary in case of decoder used to receive programme
	- Programmes unsuitable for children must be broadcast after 21.00

France	- Cinema works rated 12 +, as well as TV works likely to disturb young audience, notably when contains systematic or repeated psychological or physical violence, have to be broadcast after 22.00. Exceptionally, broadcast of such work may be possible before 22.00, if icon is displayed throughout. Such exceptions are not permissible on Tuesdays, Fridays, and days preceding non-working days. For encrypted channels broadcasting time is left to the assessment of the broadcaster, however, the enterprise must take particular attention to the fact programmes dedicated to youth audience as well as programmes and trailers broadcast immediately after the said programmes do not contain scenes likely to harm young viewers - Cinema works rated 16 +, as well as TV works with erotic character or intense violence, likely to impair physical, mental or moral growth of minors under 16 have to be broadcast after 22.30. Trailers for these works must not contain scenes likely to harm youth audience sensitivity and can not be broadcast before 20.30. For encrypted channels these programmes cannot be broadcast on Wednesday before 20.30, Saturday or Sunday morning. The trailers for works containing violent scenes or scenes likely to harm sensitivity of youth audience cannot be broadcast during the unencrypted part of the programming as well as Wednesday before 20.30, or Saturday and Sunday morning.
[illegible]	- Broadcasts that may endanger the physical, mental or emotional well-being of children or adolescents may only be transmitted between 23.00 and 06.00. - Films rated '16' can only be broadcast between 22.00 and 06.00 - Films rated '18' can only be broadcast between 23.00 and 06.00. - Broadcasts whose contents are completely or basically the same as publications included in the Index can only be broadcast between 23.00 and 06.00 - Exceptions to these time restrictions are also permissible if the broadcaster makes sure by specific means such as encryption that children or adolescents do not have access to the programme. However, this needs to be confirmed by the competent regional regulatory authority on the basis of a proposition for a decision of the Joint Office for the protection of Youth and Programming.
[illegible]	- Programmes the less harmful have to be broadcast after 21.30 - Programmes the more harmful have to be broadcast after 24.00
[illegible]	- Adult viewing may solely be broadcast after 21.00
[illegible]	- Motion pictures that have been certified by the censorship committees as unsuitable for minors under the age of 14 can be broadcast only within a strict time period[46]: between 22.30 and 7.00 [47]. This watershed rule apply also to advertisements of audiotext services such as hot lines, chat line and one-to-one services[48].
[illegible]	- No watershed rules
[illegible]	- Films which have been rated by the Dutch Board of Film Classification (NFK) for an audience over 12 years of age, may not be shown before 20.00 hours - Films which have been classifed '16 and over' may not be broadcast before 22.00 hours.
[illegible]	- Violent/shocking content should be broadcast after 22.00

[46] Law 223/1990 of 6 August 1990 (the so-called "Mammì Law"), section 13.
[47] It has been pointed out by many studies, that the effectiveness of this provision may be frustrated given that children's television viewing time appears to include a good deal of night hours.
[48] Law Decree No. 545 of 23 October 1996 converted into Law No. 650 of 23 December 1996.

	- Broadcasts that may endanger the physical, mental or emotional development of children may only be broadcast after 22.00
	- Programmes unsuitable for children must be broadcast after 21.00
	- The terrestrial channel watershed starts at 21.00 and lasts until 05.30. Cable and licensed satellite services operate with the standard 21.00 watershed for all channels, except for specially encrypted services with restricted availability to children, which have two watersheds: one at 20.00 (equivalent to the 21.00 change on other channels) and the second at 22.00 when material of a more adult nature can be shown. Other cable and licensed satellite services are expected to follow similar standards to the terrestrial channels. - Watershed does not apply in the same way to Pay-Per-View services given their stricter security systems. "18" rated films are allowed at 20.00, "12" and "15" rated films may be shown at any time. Similar arrangements will apply to variants, such as (Near) Video on Demand.

One logic that is emerging is that encrypted services receive different treatment (see Denmark, France, Germany and UK) in terms of ratings and watersheds. This may be a harbinger of the ways a watershed system could be adapted to the digital environment and for new services such as Pay-Per-View. Unlike the general broadcasting scheme, encrypted services whether terrestrial, cable or satellite based, apart from the fact that they offer basic technical means to prevent direct viewing, presuppose that viewers have expressed positive and active consent to the content carried by those services. As such, regulation that applies contents received by passive means may be, and generally is, adjusted to take into account this particular aspect. In Germany and Denmark this peculiar type of broadcasting may even exempt the broadcasters or operators concerned from applying the relevant watershed rule. A recent Italian Bill[49] also proposes such a specific regime for encoded programmes.

In addition to the watershed, an acoustic warning is often included among the protective devices. Acoustic warnings are to be found in the structures of several countries, namely Belgium, Denmark, Finland, Ireland, the Netherlands, Portugal, Spain, Sweden and UK as a possible means of protection. However, acoustic warnings may not be the panacea for the new TV setting. There are built-in restrictions to this technique. The necessary intervention of a direct human factor will make it difficult to process the amount of content needing to be rated, and this old-fashioned method of

[49] A recent Proposal ("Proposal in favour of friendship between children and TV") sets out, *inter alia*, that time limitation concerning performance of programmes not suitable for minors cannot be applied to codified broadcasting.

recommending or alerting viewers may be in contradiction with the new bias towards delegating decision-making power directly to the viewer regarding selection of programmes. In other words, this will in no way inform the viewer well in advance. And a mechanism or warning well in advance may be necessary if the goal is to allow the viewer to block or pre-select programming.

Visual icons as a means of empowering parents in controlling contents broadcast on TV is widespread, and is more likely, to some extent (cf. infra) to have a future within the next TV environment. The revised TelevisionWithout Frontiers Directive requires that programmes which are likely to impair the physical, mental or moral development of minors be preceeded by an acoustic warning or are identifed by the presence of a visual symbol throughout their duration. Nevertheless, this system has not yet been implemented in every European country and may not be for some time (United Kingdom and Germany, as they believe that this would have a perverse effect; Ireland due to the social pressure and, finally, the Belgian Flemish Community due to the lack of European harmonisation in this field). Even where it is in use there are divergences as to the design and what it represents. The countries which have opted for visual icons systems are Austria[50], Finland[51], The Netherlands (not by law but on a voluntary basis), France, Portugal, Spain, Sweden[52], Belgium (under development) and Italy (decided but not yet implemented)[53]. In France as well as in Portugal and Finland, the design of this icon applies to the different broadcasters[54] while in Spain and The Netherlands, when applied, this design varies from one broadcaster to another.

Belgium is also in the process of implementing a visual system that will be common to all broadcasters. Because of the recent change in the French icons, the Belgian authorities are revising implementation there so as to maintain an approximation of them. The Belgian system, will however, not be identical to the French system because of different regulations regarding admission to cinemas. A recent Italian

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[50] Apply only to the Public broadcaster ORF.
[51] Dedicated to TV guides and Teletext.
[52] Only applied by TV 1000.
[53] Visual icons also exist in Greece (ERT) and UK (Living, Bravo), but on a completely voluntary basis.

proposal requires that a visual symbols regime should be adopted by all broadcasters but rules have not stipulated any principles regarding the design of the icon to be displayed on screens so competing solutions may exist. A self-regulatory regime adopted by Italian commercial broadcasters, which are members of the FRT (Federation of Radio Television Commercial Broadcasters), has been implemented. A self-regulatory visual icon system may also be developed in Luxembourg (the public authorities have pronounced in favour of visual signalling, but would leave broadcasters to implement their own system).

The design of icons and the complexity of iconic systems differ from state to state. From one single icon in Portugal, the visual system is represented by 5 different icons in France, while Belgium is considering three different icons and Canal Plus Spain has developed a 4-icon system. The example of Canal Plus Spain is symptomatic of the difficulty of envisaging a transfrontier labelling solution. As part of the Canal Plus group, this broadcaster could have adopted the labelling system already implemented by its parent company. However, the Spanish company preferred to create its own system, claiming that the approach taken in France was too complex and multi-layered.

Similarities exist, however, as to the nature of the rating provider. In France, the ratings issued are, in the main, similar across broadcasters, holding programs constant, even though the rating procedure is the responsibility of the individual broadcaster. Each broadcaster is free to organise the administrative procedure as it wishes, and free to organise the composition of the rating body, which may be either internal or external. These are mainly internal for the reason that the broadcasters are reluctant to delegate any power that might have an impact on their editorial policy. M6, a French private broadcaster, has a variation on this theme: it has developed a procedure based on the successive opinion of two committees constituted of persons external to the channel (and representative of its audience – mothers and youth). The final decision, however, is taken by the managerial staff of the channel.

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[54] In France, to date, the visual icon regime applies solely to the terrestrial broadcasters with the exception of ARTE (created under the Bilateral Agreement between France and Germany, 30 April 1991), but is expected to be extended soon to cable channels.

Similar approaches to autonomy (broadcasters rating their programme) apply in most of the other countries (see table below). In Belgium it is anticipated that the responsibility for the visual icons system will be given to the broadcasters. In Italy, a code of conduct adopted in 1997 requires each broadcaster to appoint a screening committee. These structures have not been yet implemented by the TV operators. It is interesting to note however, that in this country there is a specific twist: a law adopted in 1995, provides for producers, distributors and broadcasters who intend to transmit TV films and fictional programmes during the daytime, which may significantly impair minors, must apply to the film censorship committee to obtain a certificate to do so. The specific section within the censorship committee responsible for administering this law has not yet been established.

In Germany the system is distinctive: private broadcasters delegate the rating decision to an external body, the FSF, while the public broadcasters rate their programmes (i.e., decide the broadcasting schedule) in-house.

It is clear that in most cases the responsibility for rating lies with the broadcasters.

Figure 12: National rating systems

Body				
Broadcasters	TV departments	Mandatory[55] (from 1.1.1999)	W/V	*Kommission zur Wahrung des Rundfunkgesetzes*
Broadcasters	Producers/ programme dept/channel directors	Mandatory[57]	W/A[58]/V[59] (common)	*CSA, Commissariat voor de Media*
Broadcasters	Programme dept	Mandatory[60]	W/A	
Broadcasters	Internal boards or programming responsible	Mandatory[61] (from 1.1.1999)	W/A/V[62] (common)	Telecommunications Administrative Centre (TV programmes) Consumer Ombudsman (advertisements)
CNC (film) Broadcasters	Internal committee	Mandatory[63]	W/V (common)	*Conseil Supérieur de l'Audiovisuel*
FSF[64]/broadcasters	Compliance officer	Mandatory[65]	W	FSF/ *Landesmedienanstalten*
Broadcasters	Programme dept	Mandatory[66]	W/V(v)[67]	

[55] Section 2a of the *Bundesgesetz über die Aufgaben und die Einrichtung des Österreichischen Rundfunks* (Broadcasting Act) as amended by *Bundesgesetz, mit dem das Rundfunkgesetz und die Rundfunkgesetz-Novelle 1993 geändert werden* (Federal Act to Amend the Broadcasting Act and the 1993 Amendment to the Broadcasting Act), Federal Law Gazette 1999 I 1.
[56] New system underway.
[57] Decree of 28 April 1998 (Flemish community). The Decree of the French community is still not yet adopted.
[58] Flemish community.
[59] French community.
[60] *Broadcasting Act of 19 February 1998.*
[61] *Act on Television and Radio Operations* , 22 September 1998.
[62] Visual icons are soleley published in TV magazines and Teletext. The symbol "K" refers to forbidden programs (K stands for *Kielletty*). For Swedish programs, the symbol "F" (*forbjuden*) is used. The symbol is printed after the titles of programmes that have been labelled as unsuitable for children.
[63] Inserted in broadcasters' licence (see, *supra,* note 44).
[64] Competent only for private broadcasters.
[65] *Agreement between the Federal States on Broadcasting in United Germany,* 31 August 1991, last amended on 25 November 1997 (*Rundfunkstaatsvertrag* - RStV).
[66] Law 2328/95 entered into force in August 1995.
[67] As already mentioned, ERT, the Greek public broadcaster, voluntarily implemented a visual system.

	Broadcasters		Voluntary	W/A	Broadcasting Complaints Commission Independent Radio and Television Commission
	Broadcasters/ Cinema rating body[68]	Internal committee[69] /additional sections[70]	Mandatory[71]/ Voluntary (FRT code of conduct)[72]	W/V(v)	*Autorità per le Garanzione nelle Comunicazioni*
	Underway				
	NFK (film) Broadcasters[73]		Mandatory[74]	W/A/V(v) (vary)	Commissariat voor de Media
	SCA (movies) Broadcasters	SCA/programming director	Mandatory[75]	W/A/V (common)	Instituto para a Comunicação Social
	CPCC (movies) Broadcasters	CCPC/ program or channel providers[76]	Mandatory[77]	W/A/V (vary)	
	Broadcasters	Programme dept	Voluntary	W/A/V[78]	Granskningsnämnden for radio and television[79]
	Broadcasters	Compliance officer	Mandatory	W/A(M)/V(v) (vary)	Independent Television Commission

W – Watershed / A – Acoustic warning / V – Visual symbol / (v) – voluntary

As to the methodology followed by the rating bodies, given the fact that it is in-house, it is quite secret. As transparent criteria are not generally communicated outside the organisation, it may be concluded that the process is mainly non-deterministic.

In France the situation differs from one broadcaster to another, but the common trend is that the assessment is non deterministic, with the notable exception of France 2,

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[68] Law No. 203 of 30 May 1995 - This is designated for television films and fictional programmes which, given the violent or sexual content, may significantly impair minors. This has not yet entered into force due to the delay in appointing the competent sections to operate within the censorship committee.
[69] Not yet established.
[70] Not yet established.
[71] Law 223/1990 of 6 August 1990.
[72] Adopted on 19 May 1993. Signatories are *Canale Cinque*, *Italia Uno* and *Retequattro.*
[73] As a result of discussions in recent years on media violence in society, the NFK has been asked to rate media products concerning films for television.
[74] *Media Act*, enforced in 1987.
[75] Law 31-A/98, 14 July 1998.
[76] Concerns Satellite Digital Platforms: *Canal Satellite Digital* and *Via Digital.*
[77] Article 17.2 of Law 25/1994 of 12 July 1994.
[78] TV 1000 has only developed visual symbols.
[79] Swedish Broadcasting Commission.

who have developed some objective criteria on the basis of qualitative investigations. This may be due to the particular responsibility that public broadcasters feel is vested in them, though it is not possible to draw firm conclusions as, for example, France 3 have not taken this option. The same applies to Spain as the responsibility for ratings assessment rests with the broadcasters and appears to be non-deterministic for each of those who have implemented such a system (TVE, Canal Plus Spain, Via digital, Canal Satelite digital, Catalan cable TV operators).

In Germany the system aspires for greater objectivity in ratings. Private broadcasters delegated classification to a common and external body, the FSF and guidelines have been drawn as assurance of impartial rating and respect for the editorial freedom of the content providers. The standards employed are interesting as well. For example, programs should not have the effect of making children emotionally insecure, or frightened, or disturbed because of a excessive depiction of violence or the blurring of reality and fiction. Broadcasts must not lead to social or ethical disorientation of children, e.g. through the identification with violent characters or through the representation of strategies based on violence to resolve conflicts. However, these guidelines leave a great deal of room for a subjective approach on the part of the rating board. The methodology may therefore be described as semi-deterministic.

Figures 13-19: Visual Icons

Figure 13: Austria - *evaluative*[80]

Not for children	X
Only for adults	O
Recommended for children[81]	K+

[80] Only applied by the public broadcaster ORF. *Bundesgesetz, mit dem das Rundfunkgesetz und die Rundfunkgesetz-Novelle 1993 geändert werden* (Federal Act to Amend the Broadcasting Act and the 1993 Amendment to the Broadcasting Act), Federal Law Gazette 1999 I 1.

[81] This third symbol does not appear on the screen but only in the ORF Teletext, in press releases and via the Internet.

Figure 14: Italy - evaluative[82]

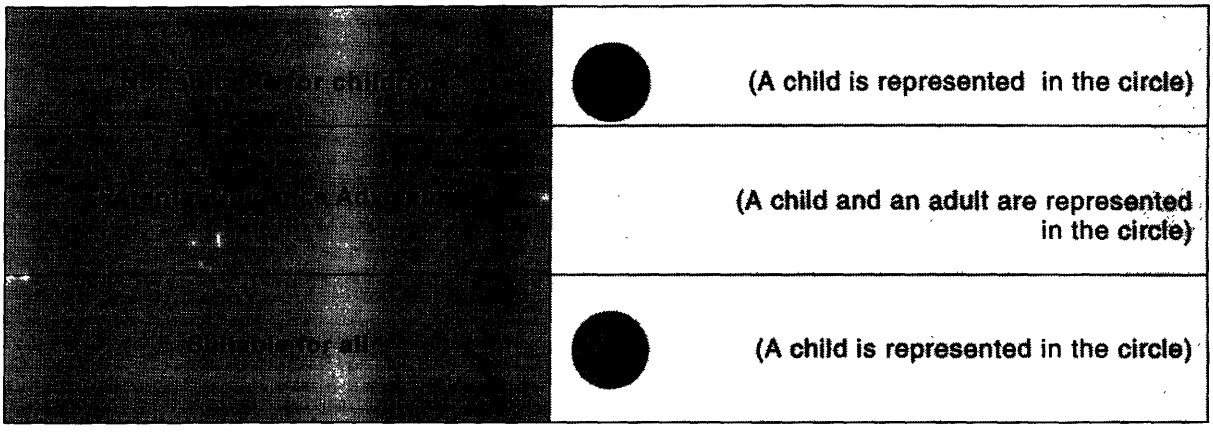
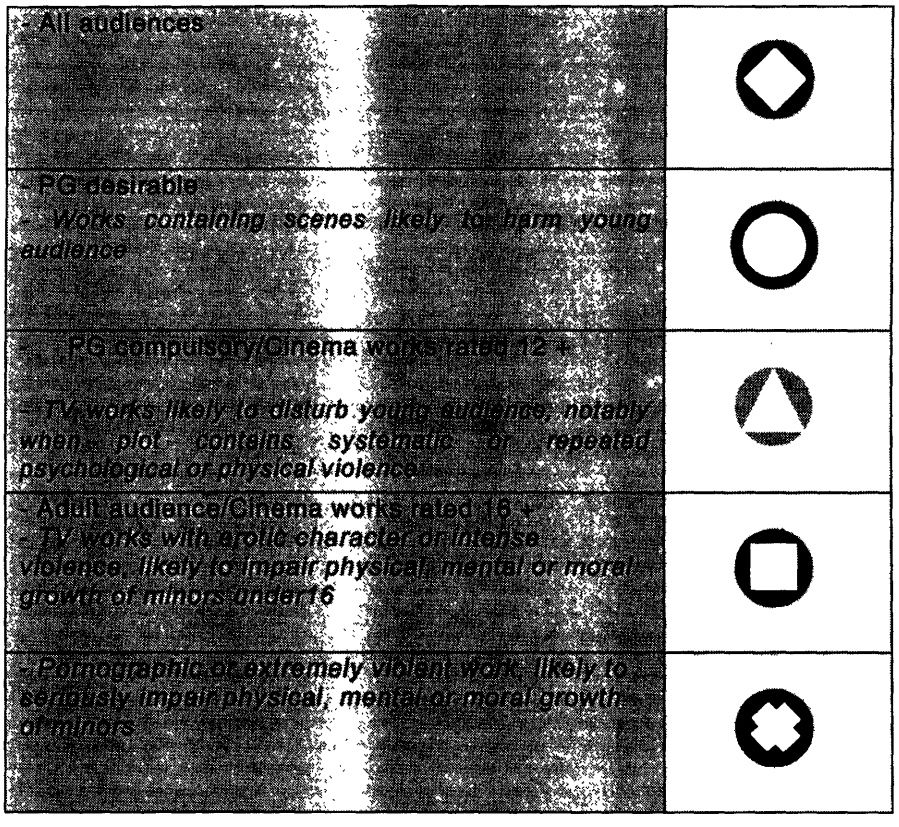


Figure 15: France - *evaluative/descriptive*[83]



Canal Satellite - *descriptive*. Content is displayed via EPG and divided into categories (Film, documentaries, animation, sports...) and subcategories (Film-action, Film-history, Film-pink square(X),...)

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[82] Only applied by the commercial broadcasters *Canale Cinque*, *Italia Uno* and *Retequattro*.
[83] Terrestrial broadcasters.

Figure 16: Portugal - *descriptive*

violent/shocking scenes	O

Figure 17: Belgium - *evaluative/descriptive* (to be revised by the Belgian authorities)

- Parental guidance - Fictional programmes which, due to number of scenes or to their atmosphere, are likely to harm sensitivity of minors under 12	▲
- Prohibited to minors under 16 - Works with erotic character or intense violence	□
- Prohibited on channels other than encrypted - Works with pornographic character and/or gratuitous violence	■

Figure 18: Spain – depends on the broadcasters

Canal Plus Spain – evaluative

All ages	Green key
Prohibited to minors under 13	Blue key
Prohibited to minors under 18	Orange key
X rated films	Violet key

In addition to the colour, the age group is displayed below the key.

TVE – evaluative

Specially recommended for children
For all
Not recommended to children under 7
Not recommended to person under 12
Not recommended to person under 18
X rated films

The information assessing the content appears on the TV screen prior to each broadcast. The rating is displayed on a blue screen containing various basic

information such as the title of the film, its author, the audio facility (mono or stereo), and also the age group to which the film content is most suitable. This age group classification is the same as the one used for the cinema, apart from the 13+ threshold which becomes a 12+ limit.

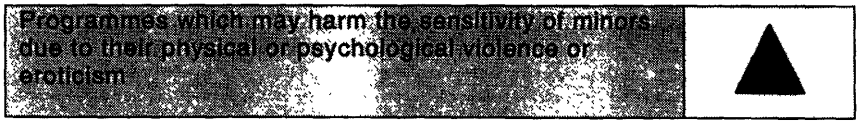
Via Digital – evaluative/*descriptive*

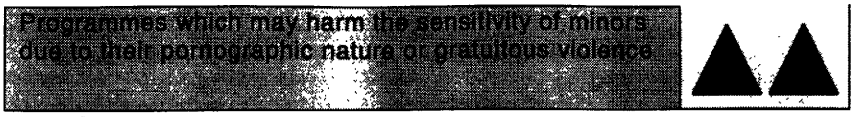
all audience	*- title, author, date of creation, language,..* *- category: documentaries, sports, series,* *- basic content description: violence, sex, etc*
Prohibited to minors 14	*- title, author, date of creation, language,..* *- category: documentaries, sports, series,* *- basic content description: violence, sex, etc*
Prohibited to minors 18	*- title, author, date of creation, language,..* *- category: documentaries, sports, series,* *- basic content description: violence, sex, etc*

There is no icon. The information is displayed on the screen by pressing a button on the remote control and can refer both to age classification or type of content.
Regarding the age classification the interesting point is that it may be possible to block content that does not correspond to a certain age group. Regarding the descriptive information displayed, this one, in a started phase at the moment may be subject to improvement. The idea under development is to insert colours for each categories of content such as yellow for films.

Canal Satélite Digital - *descriptive* - content is displayed via EPG facilities and divide the content into subcategories. As an example films are divided into dramas, comedies, horror, eroticism...

Figure 19: Catalan Cable TV operators - *descriptive*





2.5 Conclusions

Some conclusions emerge from this review of the actual rating regimes existing in Europe.

Acoustic warnings

Guided to some extent by the *Television Without Frontiers Directive*, acoustical warnings are widely used in Member States. This mechanism is generally seen as more likely to avoid the perverse effect of the "forbidden fruit" phenomenon. Acoustical warnings are also a way for the broadcaster to avoid the stigma of having part of its programmes "marked" as presenting certain risks for a part of the population. This technique presents serious drawbacks partly because it is limited in time: The warning is presented at the beginning of the programme and is not repeated afterwards, meaning that the viewer will have no capacity to be informed on the potential detrimental effect of a given programme if he missed the announcement that was made (visual icons may also present this weakness where they are not imposed throughout the duration of the programme). In addition, this system will not permit a parent to organise television viewing in advance. It is an antiquated means of alerting and informing, not responsive to challenges brought about by digital technology.

Visual Icons

The most developed rating system at the moment, in terms of information disclosure, involves visual icons, which may carry both evaluative and descriptive information. However, this system has certain limitations:

1. Icons have not been adopted in all European Union countries and are far from being adopted in some of them. This is due to cultural reasons (Ireland), social motivations (Germany, UK) or historical legacies (Greece[84]) that are not likely to alter significantly within the near future. Another reason may also be the lack of co-ordination regarding visual information which, due to the increase of cross border broadcasting, has led to some confusion among the viewers. That is why the

[84] Nonetheless ERT, the Public broadcaster has developed a visual system, even if not prescribed by law.

Flemish community of Belgium has not implemented any visual information (see Annex 2).

2. Where visual icons are adopted there are divergences regarding the design. There is no clear common understanding of a specific format to represent a specific content or a specific age group, even if, apart from the *Canal Plus Spain* case it appears that a 'Triangle' commonly represents danger and harmful content and a restricted access to teenagers while 'Orange' and 'Red' colours are used in most cases to denote violence or erotic content.
3. There is some divergence regarding what they should represent, i.e. evaluative or descriptive information, or a combination of the two. And whether evaluative or descriptive is opted for, some of countries, for cultural reasons, will not see the point of icons, which alert the viewer to certain contents, such as nudity in Nordic countries.
4. There is some divergence regarding the scope of application.
   - common icon applying to all broadcasters in Portugal, Finland and Belgium.
   - common icon applying to terrestrial broadcasters only in France and, in Austria, to the public broadcaster only.
   - specific and different icons for each broadcaster in Spain, The Netherlands as well as probably in Italy or Luxembourg in the near future.

Is the icon system sufficient? Probably not. The icon in itself, while it can refer to two or three basic considerations regarding the content (eroticism, traumatic relationship, physical violence), may not have the capacity to explain precisely what is represented within the content. For example the two red triangles of the Catalan cable operators refer to pornography or gratuitous violence, the orange triangle of the French Community of Belgium refers to erotic character or intense violence. These are the limitations of a simple icon system. The viewer knows that nudity, sexual relations or death may appear on the screen, but he will not know whether these depictions are put into an appropriate context or simply appear crudely. The choice to watch the content will not be a fully informed one, and therefore will be imperfect . Attributing more descriptive references to a given icon will lead to the opposite unsatisfactory result that the viewer will not know exactly to which of the specific contents the icon refers. A

solution may be to offer each icon within the range in a variety of forms, but this would run the high risk of confusion among the viewers and would probably not be approved by those in charge of its implementation. A clear and written description of the content to be displayed on the screen would be more satisfactory.

In addition visual icons, unless embedded in a mechanical device or recorded and displayed in a programme guide, do not allow the viewer, especially the parent, to organise viewing in advance. It is an instantaneous information source which requires an instantaneous reaction.

For all these reasons it would be difficult, from a European perspective, to rely on this type of rating system to significantly improve the ability of the viewer to make a comprehensive choice (either positive or negative) among the types of programmes to be broadcast in the new TV setting. Visual or oral information is useful to warn the passive viewer, but can not be sufficient to inform the active viewer who will need to find his way among the countless number of programmes that the receiver will transmit. Nevertheless, this form of warning and its co-ordination at a EU level should be encouraged within the existing TV setting and during the transition period, but it is not a significant concern for the future. Rating structures and procedures need to be reassessed to meet the challenges raised by digital opportunities and must accompany efficient technical facilities offered to viewers.

In either a selecting or blocking environment the issue is less the design of the rating system than the information embedded in the programme. The first attempts to display descriptive and textual information appertaining to a given programme in a digital setting, as shown by the two Spanish digital operators, demonstrated an appreciation for this concern and may help to support this change in orientation to the provision of programming related information.

Watershed

The situation is somewhat different for the watershed. A watershed is akin to a rating system but cannot be qualified as a rating system as such since it does not contain any

transmitted information to the viewer. Rather, in the European environment, the watershed can be defined as a contract between the broadcaster and the viewer. The broadcaster assures that no detrimental material will be broadcast before a certain time and the parent-viewer can rely on that programming strategy to organise its family viewing policy. This system is commonly applied in EU countries (with the exception of Luxembourg). Broadcasters strongly believe that it is the best way to assume their duties and responsibilities towards viewers and the latter have a good understanding of the terms of this "contract" (see Chapter 3 – section 2). Assuming that parents perform their role conscientiously, it is currently the most efficient way to ensure that viewers, especially child viewers, are protected from exposure to certain kinds of unsuitable content. This assumption is valid in the "passive" scheme in which the viewer is ordinarily situated. This, however, may change in the future as subscription to specific thematic channels or broadcasting services such as pay-per-view, firstly involves a more transparent determination of the content due to the thematic specificity of the service or the necessary determination of the programme to be "booked" and, secondly implies an active consent from the viewer towards the nature of the content to be displayed. This new parameter in the relations between the viewer and TV suggest that certain safeguards such as the watershed do not present the same need and would merit revisiting. Some countries have introduced graduated watershed rules according to the nature of the broadcasting service; namely, whether the service in question is encrypted and whether it requires a specific action from the viewer in order to be activated.

However, even in a digital setting where such broadcasting services may grow, watershed rules may still represent, if not perfect protection, at least a strong insurance that undesirable exposure to detrimental content will be prevented even when parents are not intensively careful about what their children watch. Nevertheless, this may be difficult to apply to services such as the pay-per-view. The commercial interests of pay-per-view hinge on the provision of selected content at a selected time. Fortunately, the necessity of payment means such as credit cards may act as a safeguard towards undesired viewing by children. It is well advised to strengthen this "gatekeeper" as much as possible.

2.6 Prospects for a Digital setting

What protects minors most consistently, and in a way most healthy for society, is not regulation but the integrity and care of parents, on one hand, and the recognition of responsibility by content producers and broadcasters on the other. This relationship suggests the adoption of a public policy that buttresses these vectors of self-implementation. One element is to encourage broadcasters to produce and disseminate content responding to the needs of children within times corresponding to child viewing habits. A second element is to encourage broadcasters to supply sufficient information so as to support parents and other guardians in the fulfilment of their responsibilities as well to encourage a critical approach among viewers toward TV content.

Because the principal idea is to engage parents and other guardians in the enterprise, to assist them in making decisions as opposed to making decisions for them, the tendency ought to be to favour the expansive use of descriptive information as opposed to what is more generally called evaluative labels. Evaluations are efficient, simple to administer, and lend themselves more easily to blocking and filtering solutions. But descriptive information more readily permits those with the most relevant responsibility (parents and guardians) to adapt TV viewing to the expectations and maturity of particular children. In the next section, the uses and abuses of each approach are identified.

What kind of information is needed ?

The extent to which the choice between descriptive and evaluative is critical depends on emerging technical developments and expectations of viewer behaviour. A preference for evaluative rather than descriptive ratings turns on many factors: these include a societal decision about the very existence of parents and the role that they actually play in the lives of their children. It turns on whether parents wish to engage in evaluation themselves, or wish for a set of proxies, whom they trust, who conduct the evaluation for them. As a rule, descriptive information responds most favourably to these concerns.

Evaluative information

If a blocking approach is desired, evaluative ratings (such as age suitability), would be the most efficient. Age classification categories, with their tradition in the cinema environment, are well-understood and long-established in most of the countries. Broadcasters have not tried to ignore them or establish competing approaches. In some cases, such as France, broadcasters are required to display an evaluative rating with a film, since film labels must be carried regardless of the medium in which they are played.

If an age-based evaluative approach for original television programming is desirable, then integration of the experience with the cinema rating entities may be required. At present, most of the broadcasters provide descriptive information, if at all, rather than an age suitability evaluation. One might attribute this to a lack of experience in this domain, but it may more likely be because of an approach that favours a shared responsibility between broadcasters and parents for determining what is suitable for the children.

A second question is whether an evaluative approach can be harmonised at European level? As we have seen, age categories are not the same across the Member States; none of the European Union countries' specific age categories have been created for original television programs and none have grown up under the sole initiative of the broadcasters. In addition, these age categories are generally introduced by law. Harmonisation is difficult to envisage and would be very State-sensitive. One could contemplate a *rating conversion* system. An age recommendation or certification performed in one country would correspond to a given EU formula that would link it with a corresponding age recommendation or certification in another country (see Figure 20). It would rely on the relevant rating entities "pegging" their ratings hierarchy to the EU standard. As an example, a movie rated 12+ in Ireland might correspond to a suitable for "All" in Finland or a "Recommended 7+" in Spain. This would have the advantage of facilitating the movement of programmes across national jurisdictions while preserving ratings and avoiding an heavy work of re-classification to

be ensured by operators of the country of reception.

Adapting the film evaluation systems might yield the possibility of harmonisation; but it would still require that programmes be rated so as to attach to them an age suitability, and that is far from being the case at the moment. In addition, cross-boundary evaluations for age purposes may be inherently simplistic and imperfect, unable to take into consideration the motivations and criteria which yield particular classifications in any of these countries. What may lead to a rating of 12+ in Ireland may not necessarily lead to a "Recommended 7+" in Spain. This is the main difficulty of an evaluative formula: It hides the social, psychological or cultural motivations leading to the fixation of a certain age suitability. These motivations would be highly difficult to harmonise as it is strictly linked to the approach countries may have towards contact of children with potentially detrimental content. The high transparency of descriptive criteria, where exempt from judgmental parameters, should overcome this issue.

Figure 20: Cinema Ratings conversion

All	All	All	All	All	All	Ø	All	All	All	All	R4	All	All	All
R6	All	6	All	All	All	Ø	All	All	All	All	R6	All	All	All
R6	All	6	R7	All	All	Ø	All	All	All	All	R6	R7	7	All
R10	All	6	R7	All	All	Ø	All	All	All	All	R6	R7	7	All
R10	All	6	11	All	All	Ø	All	All	All	All	R6	R7	11	All
R12	All	12	11	All	12	Ø	12	All	All	12	R12	R7	11	12
R12	All	12	11	All	12	Ø	12	All	All	12	R12	R13	11	12
R14	All	12	11	All	12	Ø	12	14	14	12	R12	R13	11	12
R14	All	12	15	All	12	Ø	15	14	14	12	R12	R13	15	15
R16	16	16	15	16[85]	16	Ø	15	14	14	16	R16	R13	15	15
R16	16	16	15	16	16	Ø	15	14	17	16	R16	R13	15	15
R18	16	18	15	18	18	Ø	18	18	17	16	R18	R18	15	18

While reductive evaluations like these are well suited to a blocking approach, the drawbacks must be reiterated.

[85] In accordance with the *Film Act of 12 March 1997*, age classification may be circumvented as it is permitted for children of the age of 7 and above to watch any film in the cinema, as long as the child is accompanied by an adult.

- To be effective, a blocking facility has to be based on one dimensional criteria such as age or a basic content descriptor (e.g. sex, violence, incitement to immoral behaviour, crude language), possibly presented in a variety of forms (Sex Level 1, Sex Level 2, Sex Level 3). As a consequence, works to be rated in such a way will not be appreciated in their complexity and will be rated without an appreciation for context. Risk is also high that certain programmes that would have been of interest for children (as it has been already widely mentioned for the Internet filtering facilities), will fall under these too simplistic criteria and thus never be displayed on the screen.
- In giving to parents or guardians the faculty to block programmes responding to certain criteria, the risk is high that the blocking will not be revisited frequently. In extreme circumstances, children may be deprived of opportunities to access content corresponding to their development needs. The UN Convention on the Rights of the Child[87] stresses explicitly the importance of the mass media in the development of children and requests States to act with awareness of the functioning of mass media in disseminating beneficial information and material to children.[88]
- By reducing incentives, blocking facilities may also have indirect and deleterious implications for the creation of work.

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[86] Age categories 6, 8, 10, 12 and 14 are used. There is also a PG-option: children "3 years younger (than the given age) may attend if accompanied by a parent (or legal guardian)". The following PG categories are possible: PG-8, PG-10, PG-12.

[87] U N General Assembly, *Convention on the Rights of the Child*, (12 December 1989), A/RES/44/25. Signed by all countries except Somalia and United States.

[88] Article 17
States Parties recognize the important function performed by the mass media and shall ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of his or her social, spiritual and moral well-being and physical and mental health. To this end, States Parties shall:
(a) Encourage the mass media to disseminate information and material of social and cultural benefit to the child and in accordance with the spirit of article 29;
(b) Encourage international cooperation in the production, exchange and dissemination of such information and material from a diversity of cultural, national and international sources;
(c) Encourage the production and dissemination of children's books;
(d) Encourage the mass media to have particular regard to the linguistic needs of the child who belongs to a minority group or who is indigenous;
(e) Encourage the development of appropriate guidelines for the protection of the child from information and material injurious to his or her well-being, bearing in mind the provisions of articles 13 and 18.

Descriptive information

One of the main drawbacks of evaluative rankings is that they obscure the exact nature of the content. Parents should be informed directly of the content contained in a programme so that they can judge whether their child is mature enough to view it. What we call descriptive information is that set of data that permits judgement to be adequately exercised.

Here, too, there are fundamental assumptions about the context both of viewing and decision-making. A choice for descriptive information is based on presuppositions about the ability of the parent or guardian to process that information, about the availability of time, and about cultural familiarity with the terms being used. It is hard to conceive of a situation in which long-form descriptions, sufficiently detailed to encompass the whole, are adequately available. And, as with evaluations, any decision about labelling or rating sets forth the subject matter (sexuality, violence, etc.) that is to be the subject of the process. Digital services will permit the viewer to receive a huge amount of programmes and ample information about each of them, but that does not answer the question of how such information will be processed.

A more easily solvable problem than this viewers processing question is the mirror-problem. The mirror -problem--whether the rating providers can manufacture such information about so many programmes--may be surmounted via the emergence of a plurality of providers.

As an example, a subscriber to Canal Satellite probably receives, at present, approximately 100 channels. The EPG of Canal Satellite could permit the viewer to make a pre-selection for a given day (up to seven days in advance), within or without a given time and within or without a given channel according to various categories presented in a variety of forms such as:

For Documentaries: Doc-cinema, Doc-culture, Doc-discovery, Doc-escape, Doc-history, Doc-music, Doc-nature, Doc-portrait, Doc-sciences & techniques, Doc-society, Doc-sport,

For movies: Film-action, Film-animation, Film-history, Film-laugh, Film-passion,

Film-pink square (X rated), Film-science-fiction, Film-shiver, Film-society, Film-suspense, Film-tenderness, Film-thriller.

When choosing a category, a selection of programmes will then appear on the screen containing the title of the programme, the duration, the channel and the starting time. By clicking on the title of the programme the viewer may obtain more details about it (director, year of creation, country of origin, credits, and a brief). Navigation facilitates pre-selection (understood as the capacity for the parent to select, at a given moment or for a given period, a certain type of content). To be effective (both on the rating side and on the selecting side), a pre-selection function must introduce categorisation: content descriptions will be filtered through the prism of criteria brokered, over time, between the parent and the TV operator.

Out of this informal pattern of brokered descriptive ratings, it is likely that common descriptive criteria would evolve. These descriptive criteria would emerge both from the repertoire of those engaged in description and the preferences for information selected by parents and other viewers. A function, at the European level, is to encourage harmonisation through the observed evolution of a common practice of description. The exercise of evaluating content criteria applied by cinema rating bodies throughout Europe illustrates how the following content descriptors may be obtained.

Figure 21: descriptive criteria

Sexual-deviation Child Pornography Sexual relations between humans and animal. Sexual violence or coercion **Sexual description** Pornography Full nudity in a sexual context Explicit simulated sex, Complex sexual relationships Impressionistic sex Full-frontal nudity in a non-sexual context, Implications of sex Non-sexual nudity	**Physical violence** Excessive violence Scenes of severe violence to people or animals Graphic violence, Horror with some gore Horror Mildly graphic violence Realistic violence Shocking surgical operations Mild violence **Psychological violence** Psychological trauma Traumatic relations between parents and children, Excessive exploration of pathologic forms Hypnotic phenomena	**Scatological language (limited, strong)** **Sexual expletives (rare, more extensive, frequent)** **Vulgar content (rare, more extensive, frequent)**	**Risk of identification / Positive images of : Immoral behaviour, Suicide, Soft/hard Drug use,** **Violence (emphasis on weapons, glamorise dangerous weapons, details of harmful or criminal techniques, induce to imitation of crimes)** **Brutalising effect (weakening inhibition towards use of violence)** **Incitement** **Encourage sadistic pleasure** **Promote hatred and revenge,** **Incitement to Racial hatred, Sexism, Discrimination**	**Obscene or against public morality** **Controversial religious subjects** **Glorification of the Nazi ideology** **Glorification of war** **Intimidation, Field of tension without possibilities to escape, Fascism, political extremism** **Sadism, Emotional shock, Bad ending/open ending,**

Such a list should be elaborated. Actual rating bodies and specialists such as educationalists and psychologists may have the required competence and legitimacy to perform such a task. A European platform bringing such experts together should be encouraged for this purpose. The result would be an armoury of key content descriptors that would provide the basis for judgement by the viewer. To the extent possible, these should be limited to neutral descriptions of the content without any judgement from the rating provider (caveat: this goal may be difficult to reach regarding behavioural content). Thus, these descriptions would be the most sensitive manner in which to negotiate the cultural differences within the Member States.

Current descriptive systems are too limited to support genuine content selection exercised by the viewer and therefore need to be elaborated. Titles of the films, name

of the author, linguistic versions available and a brief survey of the story may not be sufficient to inform viewers about the specific type of content they would find within the work. In this sense, cinema rating bodies have developed a case-law approach or transparent criteria that may serve as a starting point[89]. But the process of building, without overt government involvement, a descriptive process that is serviceable, efficient and has integrity is a difficult one.

Who might perform this task ?

At present, rating procedures mainly rely on the broadcasters. By controlling ratings, they also maintain contact with their audience and have an influence on them. A digital television environment, with its abundant programmes, will challenge this structure, and may produce competing rating entities.

In the future, the structure of rating and labelling, the process of providing evaluative and descriptive information, will change markedly. We foresee the growth of third-party entities who for self-generated interests or for a fee provide the appropriate information to parents and other viewers. We foresee, as well, an environment in which key entities exist to provide benchmarks within particular Member Sates and for Europe as a whole.

How will this evolve?

Content producers, content providers

The now dominant rating providers in broadcasting are the content producers and, moreover, broadcasters and narrowcasters themselves. The next years will determine whether they can perform this function adequately, notwithstanding the commercial stake they have in the outcome. It is possible to imagine, as an analogy to the Internet setting, that content producers may rate and label their content directly according to criteria developed by more neutral entities. These entities may emerge from the industry itself, or may be standard-bearing entities, with some relationship to

[89] This may be even more useful as cinema rating bodies are usually the ones that have developed the more sophisticated approaches toward the assessment of content (resulting from their long experience, establishment of criteria, case-law approach). Descriptive standards developed in the Internet setting could also be take into account but, given the nature (mainly static content) of actual Internet

government. Such an entity may both help evolve descriptive criteria and, *a posteriori*, provide a check on whether producer or provider ratings are credible. A complaint procedure may also be a possibility, following schemes already devised in the Internet setting. Alternatively, a State or industry body may monitor rating schemes, either on a random basis or following viewers' complaints.

In addition to the necessarily simplistic label, it could also be required of the content producer to make available a sufficiently comprehensive, and possibly standardised, explanation of the content in order for the operator to organise a pre-selection function and for the viewer to use it. The use of sophisticated and listed descriptive criteria as indicated above may be of high relevance.

Monopolistic third-party body

An alternative is for the standard-setting entity[90] to provide descriptive or evaluative information in addition to its other functions. This system is not consistent with pluralism or with minimising the State function; in addition, such single bodies would be incapable of evaluating all the content to be provided in the new digital setting. This shortcoming is already obvious with respect to video games, software and internet rating. In addition, content producers as well as viewers in certain countries which may harbour a strong "State-resistant" feeling (e.g. Portugal, Spain, Greece) may be reluctant to delegate content to a State body unless the description of the content is provided through a genuinely transparent methodology and procedure.

Plural third-party entities

A more likely and preferred option is that various competitive third-party entities provide either evaluative or descriptive content assessment. These third party entities will be cause-driven or market-oriented: They will be answerable to their own constituents or to the market. Parents will, if they so desire, subscribe to competing content screening organisations, which can be religious based, or value based, linguistically or national identity based.

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contents, these approaches may prove to be overly simplistic and may fail to take into account a contextual approach.

From a social perspective, one measure of such a system is whether various cultural, social, ethical, ethnic, political and religious concerns of the inhabitants of a given country or at EU level are well represented. Pluralism is fostered only if a parent has a variety of points of view especially where evaluative ratings are on offer. This option depends on the involvement of groups in the evaluative process who have not been involved before. The EU and the Member States may have a role in educating groups as to the opportunities and responsibilities in providing a pluralistic third-party rating structure. In the case that part of the population does not find its values or expectations represented within the range of operational rating providers, the need for ratings normally perceived as "consensual" may become compulsory. These required ratings could be performed by a single body, composed of representatives of the different segments of the society, concentrating on certain types of programmes such as movies, TV fictions, documentaries and animation.

These third party entities may also act as pre-selectors of content for the viewers who accept the values the entities represent. Indeed, in a pluralistic setting, some entities rating and recommending programmes will merely approve a list of offerings rather than go through the far more cumbersome process of rating or providing sophisticated information. Content screening organisations will download the unique programme identifiers of screened programmes to those consumers who have selected them as screening provider and only those programmes will make their way to the consumers' TV screens. With respect to the Internet, screening entities that specialise in selecting children sites already exist. This process can be extended to television programmes.

However, close attention must be paid to potential conflicts of interests. This may support action to ensure that pre-selecting entities are completely independent (financially, administratively) from content producers and providers.

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[90] That is, a governmental body or a monopolistic third-party body composed of representatives of the various segments of the society.

How may the rating be performed

Geographical level

We have discussed the question of descriptive versus evaluative ratings and the nature of the rating entity. A final question is what role should be played at the pan-Europe level as opposed to the State level?

The answers to our questionnaire - sent to key actors - suggest that there is little support for strict harmonisation in the domain of ratings or the establishment of common age categories or common content descriptors. Most broadcasters believe that a European approach may be useful but only to the extent that it is limited to co-operation. The main support posited for this position was the difficulty inherent in overcoming the many cultural differences. At the European level, there can be the exchange of opinions and sharing of experience via, for example, the creation of a platform for constant dialogue.

On the other hand, plural rating providers and screening entities as defined above do not have to be restricted to State boundaries. Many such entities have concerns--ethnic, political, religious, philosophical--that are not limited by any cross-border motivations and thus may be represented at an higher geographical scale than the territory of the State. Linked to the fact that satellite developments will significantly increase cross-border movements of audiovisual services, third party groups may rate not only programmes dedicated to their national territory but also others.

A role at the EU level would be to encourage common descriptive criteria, or the use of common terms in describing similar programme content. This solution is the most likely to have a pan-European potential. If third-party pluralistic entities are to be encouraged, it is virtually assumed that there will be a variety of evaluative criteria. Perhaps all that can be required is that a third-party entity, if it is sponsored by an interest group, makes known what values lie behind a particular approach to evaluation. We have described above processes that might permit a rating in one Member State to be converted to the evaluative currency of another Member State. One possible role at the EU level is to experiment with such conversion criteria. But,

once again, the recommended approach is to develop descriptive criteria as a result of the sharing of experiences and practices of the actual rating providers, combined with the insights of experts of childhood.

Methodology

There is a debate about the methodology to be followed by rating entities and the role of government in establishing a methodology. Consistent with our discussion of pluralism in rating entities, we favour flexibility in methodology, so long as that methodology is transparent.

Some favour strongly what might be called a deterministic methodology, meaning that decisional criteria are articulated and consistently used. Given a deterministic rating system, one rating provider would achieve the same result as another with the same programme. Other things being equal, consistency in process is desirable; but here, there is an emphasis on pluralism, disclosure and community decisions as to which entities should survive. Furthermore, as to the descriptive ratings, there is less of a specific need for deterministic and transparent methodology where the information provided tends to be more neutral and does not imply any judgement regarding the content.

A different analysis arises when it comes to evaluative ratings. There, classification often camouflages the process that resulted in the rating. The more monopolistic or oligopolistic the rating system, the more pressure is warranted for disclosure and consistency. A pluralistic situation where a high number of rating providers exists does not require the same attention as the existence of ratings will depend directly on the credibility granted to the rating entities. This loop of credibility should be anticipated to eliminate, over time, rating providers who fail to match the expectations of their consumers.

A certain degree of deterministic methodology is therefore really only required in the situation where a monopolistic/oligopolistic evaluative rating is performed.

Support

Encouraging third parties to perform the evaluative and information tasks also raises the question of their access to the content in order to rate it. Voluntary access may be forthcoming as it may attract audience. However, broadcasters may resist making programming available in advance, especially if a rating might be restrictive. One role, at the EU or Member State level, is to develop processes that will permit such access as a way of avoiding or minimising government evaluation. The most prudent step to be taken on this path points to positive approaches to technology and rating mobilisation. As explained in the previous chapter, a selective approach to the EPG technologies will place a premium on information about programming content. A positive approach will offer a potentially strong economic inducement for producers to distribute their programmes to information providers, who, as with the Internet, will be their means of reaching the consumer. Facilitating a market for the information about content and the ascent of "brand" recognition of information providers will create incentives to allow the greatest number of appropriate groups access to content for evaluation purposes. Though, producers may still be reluctant to offer their product widely, for fear of negative reaction from certain groups, if they are to reach those segments of the market place, which require an endorsement from a particular information provider, they will have no choice but to take that risk.

Self-regulation might also yield improved opportunities for viewers to select among rating entities. Broadcasters will often be the gatekeepers for rating systems and can make access easy or difficult. This role may also be played by Teletext or EPG service providers. How this plays out may be an area for EU scrutiny. An obligation or a strong recommendation to provide information for viewers may be inserted in the licences of the content providers.

Finally, the EU might monitor the evaluation and labelling process to determine if leaders emerge, standard setters that provide excellent service to parents interested in pre-selecting or having greater control over programmes that their children want. The function of such leaders could be strengthened or at least information about their methods and performance considered and distributed. This task may be performed by

a single body, commonly identified by citizens of a given country as being an authority in the field of broadcasting activities. Rather than recommending particular rating entities to viewers, this single body could provide viewers with the necessary information permitting the viewer to assess the relevance of these rating bodies as to her requirements and values. Information such as the values and aims of the rating provider, its field of coverage (type of programmes rated), the way to access these ratings (identification of broadcasters or EPG service provider that carry the ratings, need for a subscription or not) would have to be made available to viewers by means of brochures, Internet postings, newspapers, etc.

Control

This Study has already indicated that controls on the rating entities may be exercised via several means directly available to the viewers (via hotline or by choosing whether to subscribe to a given service), or in the hands of a control body in charge of supervising the appropriateness of the rating performed (following viewers complaints and/or on a random basis).

Given the power that comes with rating, there might be pressure to licence entities that engage in the rating or labelling process. A licence delivered by the relevant national authority might mandate ethical rules to be respected. But regulatory measures are likely not the first appropriate action on this front.

In the alternative, one could envisage the adoption of a code prescribed by the industry and adopted voluntarily by all the various key-actors. The EU could be involved in the fashioning of such a common code of conduct, though it is possible to envisage different codes of conduct taking into account different modes of rating and different kinds of rating entities. Respect for the code(s) might be enforced by sanctions pronounced by a board or committee composed of representatives of the signatories and could lead, for example, to the exclusion or suspension of the violator. Such boards or committees could (i) act on their own, supervising on a constant or random basis the good application of the rules formulated or (ii) be the recipients of complaints formulated via hot-lines. Following the framework already drawn in the

recent EC Recommendation on the protection of minors and human dignity,[91] an EC instrument could draw the framework in which such codes may be elaborated and implemented.

[91] European Commission Directorate-General X, *Council Recommendation of 24 September 1998, on the development of the competitiveness of the European audiovisual and information services industry by promoting national frameworks aimed at achieving a comparable and effective level of protection of minors and human dignity*, (Official Journal L 270, 07.10.1998), 48.

Chapter 3 Family Viewing Alternatives: Economic Justifications, Social Efficiency and Educational Support

Introduction

In the previous chapters we discussed what is at the heart of the European Union's concern: what prospect is there for a technical device that will assist parents to exercise choice within their homes? Furthermore, we provided an analysis of the rating and labelling systems that are the backbone for such technical devices and, in addition, those increasingly common systems that function without technical devices, but provide efficient and useful information to parents and others.

We conclude with a discussion of three extremely important questions. Firstly, in a time when government intervention in areas touching upon personal choice and rights of freedom of speech is often questioned, what can economists tell us about the justification for these labelling and rating systems? Secondly, if ratings and advisories have been introduced, how effective and efficient are they in protecting children from harmful content? And finally, for these systems to work, what needs to be done to educate the public as to the nature of television viewing and to increase the capacity for television consumption to be an activity that is approached critically, with an awareness of its costs and effects as well as its pleasures and benefits? These issues are intertwined, because an analysis of the inadequacies in a "market" or parental television empowerment demonstrates the need for education as well as rating and labelling systems.

1 Economic Efficiency and Regulatory Interventions

We start with a brief economic analysis, examining issues of efficiency and equity in the context of protecting minors by way of public regulation of content. A more

extended version of this discussion, complete with graphs and charts, is contained in the Annex. The key questions that need to be addressed are[1]:

- What actually do we mean by choice? Do consumers really enjoy the greatest possible choice of suppliers, information, and audio-visual services in the current broadcasting setting and is their situation likely to improve in the future digital setting? Are there any income or socio-economic factors associated with the ability to receive information and to make rational choices? These are important issues because of the assumption that the "choice" and/or information available to parents is full and unproblematic, making intervention to repair "market failure" unnecessary.
- Can regulation enhance any of the various aspects of efficiency and equity, by: (i) improving the content information provided to consumers and (ii) facilitating parental control of minors? Obviously more information is usually preferable to less, but we need to ask why the market does not provide all the necessary information itself and who, among the population, is disadvantaged by the current form in which information is distributed or by its absence.
- Are there substantial efficiency and equity benefits associated with having public compulsory intervention rather than a pure free market supply?

The current (and future digital) audiovisual markets are likely to be affected by familiar problems associated with imperfect and asymmetric information; namely, that content is, and is likely to remain, influenced by a small number of operators, with serious consequences in terms of efficiency and equity. Information is imperfect because there is little market for the kind of data that tells consumers not to buy. Information is asymmetric because it is understood or used more readily by some consumers than others. Making information less imperfect and its distribution less asymmetric improves all consumers' control over the content they wish to view or which they desire for their children. That is or should be the goal of public intervention.

Appropriately co-ordinated government action (which might take the form of encouraging self-regulation) serves efficiency grounds if, as should be the case with a

[1] The questions are fully examined in the Economic Modelling Background chapter in the Annex (Annex 1, Chapter 1)

properly structured rating system, it can expand competition while improving consumers' information. Multiple ratings and labels can ensure a proper evaluation of content and the quality of the product, as well as its possible benefits, At the same time such a system ensures stimulation of competition. Furthermore, from an economist's perspective, there is another way in which effective ratings and labelling systems—those that allow parents to use technical devices to perform parental functions without being at home - improve social welfare. Assisting parental control by means of technical devices may have positive benefits for family income, since time allocated to watching with children and/or making prior judgements about appropriate television programmes for children's viewing decreases time available for work. This not only reduces earnings directly, but indirectly, by slowing down the growth of the parent's career as a consequence.

There is legitimate social concern about changes in the broadcasting environment, since its regulation is similar to that of a public utility, affecting all households simultaneously (for example, rating and labelling systems which might lead to channelling and blocking of programmes). Moreover, the introduction of rating and labelling systems may have external benefits, or benefits that extend to others than the parents and children themselves. This is the case if such benefits improve parental supervision and if improved parental supervision yields better young people and better citizens. The provision of a better broadcast environment for children brings satisfaction to other members of society, who benefit indirectly from an improved society. Hence, the usual conditions for a "market failure" argument apply; namely where there is a public good and an externality.

The argument for public intervention in the supply of content information is also important from an equity perspective. Obtaining the information necessary for parental control has a cost, which is sometimes significant. The problem of this cost is greater for lower socio-economic groups. Accordingly, television consumption patterns of children in these groups may be more unbalanced than might otherwise be the case, e.g. excessively violent or inappropriately dependent on particular aspects of audiovisual culture. Moreover, parental activities, which often turn on the mother,

have a negative effect predominantly on the labour and earnings of women, which are already subject to discrimination. By decreasing the parental control activity of mothers, regulation may -at the margin, to be sure - redistribute resources to women, help reduce the *feminisation* of poverty and improve the well being of poor lone-parent families. Voluntary action may fail due to the incentive to free ride. The market failure argument applies again and concerns about equity concern should lead to public intervention.

Technological devices that enable a faster selection of content and filter unwanted products may facilitate parents' control of their children's education and decrease restrictive public interventions (those related to delinquency or worse). The transmission of appropriate and multiple ratings would allow each household to determine the broadcast environment best suited for their children.

However, the presence of an externality may lead towards more drastic solutions and, as is the case with education, there may be arguments in favour of stronger regulation if parents cannot always be trusted to act in the best interests of the child, either due to insufficient information or a lack of parental initiative.

It is difficult to determine social benefits or aggregate individuals willingness to pay, since households have incentives to mislead the policy-maker, seeking to reduce required contributions by understating their willingness to pay, or, where acting as free-riders, overstating it in order to increase their benefits.

However, as far as parental control activities are concerned, we can separate parents' expenditure of time (in control activity) from other expenditures (net flow of commodities) that increase child welfare, and examine the impact of a given audiovisual regulatory environment. Reducing control activity through regulation allows parents to devote more time to income-producing activities, other parental activities and leisure. Improvement of the children's broadcasting environment generally increases the benefits from work and parental activities, since the household becomes more productive by being able to spend more time in work and other

parental activities. Moreover, regulation implies additional benefits through the reduction of problems caused by: (i) uncertainty about the future environment (i.e. the *option value* of regulation) and (ii) the *irreversible* harm, which, in the absence of a regulated environment, stems from ex post insufficient parental control.

The benefits deriving from the time saved in parental control activities can be measured by the potential for increasing consumption, i.e. through the *compensating variation* measure of the benefits (the amount of money the household in the original environment should be allocated to make it as well off as the household in the environment improved by regulation). As an approximation, using earning data we can consider the monetary value of parental control activity - which is no longer required in the regulated environment – in order to reach the same level of welfare for children.

Regulatory benefits and costs may vary among different socio-economic groups, even in a perverse way. However, once the financing of regulatory social costs by progressive taxation is taken into consideration, the system as a whole is likely to improve equity. In any case, an unequal and perverse distribution of the regulatory net benefits will not necessarily be the outcome and could be avoided with the right technical design.

2. Social efficiency

Given the economic justification offered for interventions such as ratings, what social benefits do they offer, and how efficient and effective are the systems currently in place? To date, there is surprisingly little research on the efficiency of ratings and advisories (verbal or written warnings). This fact is not only noted in the National Television Violence Study, conducted in the US, it has also been stated repeatedly by the country experts participating in this study and by leading organisations engaged in children and media issues. However, this is less surprising if one considers that visual ratings in contrast to verbal warnings are relatively new - in most countries. As a result the most comprehensive research has been carried out in the United States, where the history of monitoring violence stretches back to the 1950s and has prompted the study

of the efficiency of advisories. Following the more recent development of visual symbols and acoustic signals, studies have also been conducted in Belgium, France -, Italy, and in the UK, as outlined below. Where possible the findings have been grouped into the various issues related to efficiency such as awareness, understanding, satisfaction, utility, appropriateness, impact and need for improvement. Special attention is also given to the US.

2.1 Belgium

A study by Herman and Leyens[2] investigated the impact of verbal warnings on the audience in Belgium during the years of 1972-1975. The study focused exclusively on films, and audience sizes were compared for films broadcast with and without verbal warnings. The main conclusions drawn from the study were that films broadcast with a warning about violent or sexual content attracted larger audiences. This is of importance as it may prove that the contrary effects associated with visual symbols (i.e. attracting a young audience) also apply to verbal announcements.

2.2 France

An opinion poll conducted by the *Conseil Superieur de l' Audiovisuel* (**CSA**) early in 1998 researched the effectiveness of the French rating symbols.[3] At the time, the system consisted of three visual symbols: a green circle for programmes containing scenes likely to harm young viewers, an orange triangle for programmes unsuitable for viewers under 12 years of age and a red square referring to films unsuitable for viewers younger than 16. The survey revealed the following results:

Level of awareness amongst parents

80% of the people interviewed were aware of the existence of the visual symbols; for the parents of minors the figure was 88%.

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[2] Herman, G., and Leyens, J. P. "Rating films on Television," *Journal of Communication*, 27 (4), p 48-53, (1977).

[3] The opinion poll refers to the previous rating system which was replaced in September 1998. The introduction of the new rating system was partly a result of the findings of the study.

Level of viewer (parents and children) understanding of the warnings provided by the system

The meaning of the icons was best known for the Red Square - 63% gave a fully or at least partly correct interpretation of its meaning. Awareness of the meaning of the orange triangle was lower with 53%, and only 34% were able to give a definition for the green circle.

Level of satisfaction

Of the people interviewed, 63% said that they considered the visual icons as very or relatively useful.

Perceived utility for a) protecting children b) as an educational modality

75% of all children between 8 and 14 years of age interviewed say they take the icons into account when choosing a programme for themselves (80% for the 8 to 10 age groups).

Perceived appropriateness for the range of proposed TV programmes, and perceived need to extend system to additional programming such as news, sports, advertisements

58% of people questioned said that the classification "is very relevant" (11%) or "rather relevant" (47%) regarding the level of violence of the programme.

Impact on the viewing policy of the family

84% of parents stated that they take into consideration the signals provided by the icons for their children's television consumption "at least sometimes". This is a considerable increase on the results of a previous opinion poll from January 1997, where only 53% of parents made use of the signals. Also of interest is that 79% of all adults claimed that they do not use of the signalling system for themselves.

Degree of need for improvements perceived by viewers / level of need for and nature of accompanying additional measures

Of the parents in favour of the rating system, 19% thought that it needed to be

improved and more details needed to be provided in order to make it more effective. Ideas for improvement of the current system included the complementary use of an acoustic signal. Others suggested the extension of the symbols, currently applying to films and fiction only, to other programmes such as documentaries (e.g. about war or prostitution). The CSA concluded that the system ought to undergo some improvements. Amongst other suggestions, the CSA recommended changing the colour of the green circle, due to the substantial amount of confusion surrounding its meaning, and prolonging the presence of symbols on screen if not displayed permanently (to 1 minute at the beginning of the programme and 15 seconds after commercial breaks).[4]

A qualitative study carried out by SORGEM in November and December 1997 established the following facts about parental use of the above ratings:

- When asked which criteria guided their programme choice most parents said they trusted the schedule and they believed that violent programmes were not broadcast during daytime.
- They also thought that programme guides were the best way to select a programme.
- The majority considered the current system of coloured symbols as effective; some parents, however, stated that their children had a better understanding of the signs than themselves, and that they needed to learn the meaning of the symbols before they were able to explain them to their children.

As with the CSA survey there was a great deal of confusion about the green circle; some interviewees even associated it with the 'go' signal given by a green traffic light and interpreted it as "suitable for all children". Many parents believed that the symbols merely performed the function of a complementary tool, together with other sources of information (TV guides friends). The symbols were perceived as a real warning for children, but on the other hand their efficiency was doubted if they were not present on the screen throughout the broadcasting of the programme.

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[4] In the new rating system the orange and red triangle are present throughout the duration of the programme.

2.3 Italy

In January 1994, the private broadcaster Mediaset introduced a colour-code, the so-called 'traffic light system', for its channel Canale Cinque, at the time the only initiative of this kind in Italy. The system was introduced following a lengthy survey conducted by a team of university researchers, psychologists, educators and audio-visual experts. All scheduled fiction programmes are classified as to content, with particular reference to scenes featuring sex or violence. The classification criteria were established with the help of a team of external experts who assisted the editorial staff. Three different coloured symbols are used: green to indicate programmes which children can watch without any concerns, yellow to suggest "parental guidance", and red to mark programmes unsuitable for children. Each coloured symbol contains a graphic logo to make the message clearer in case the colour alone is insufficient. TV programme guides and announcers draw attention to the symbol, which also appears on the screen during the broadcast and immediately following commercial breaks. The "traffic light" symbols are also shown in trailers, announcements, and newspapers, at the beginning of every fiction programme and after every commercial break.

Since February 1997 the channels Italia Uno and Retequattro have also adopted the scheme, by using the same classification criteria and identical symbols. In order to apply the same labelling principles for fiction programmes shown on networks with three completely different types of schedule, regular liaison meetings were held with editorial staff, marketing directors and a team of psychologists and educators.

In July 1994, R.T.I. carried out a telephone survey to verify the level of awareness and effectiveness of the traffic light system. During the course of the survey, 1140 people aged over 14, and representative of the Canale Cinque audience, were interviewed.

Level of awareness amongst parents

The study established that 53% of respondents were aware of the existence of the colour-coded symbols. Out of these 57% were able to recall them spontaneously, while 43% recalled them when prompted.

Level of viewer (parents and children) understanding of the warnings provided by the system

At all events, 81% of respondents judged the symbols to be very clear or fairly clear. There was some degree of uncertainty in respect of the correct interpretation of the various symbols. Among the respondents who were aware of the colour-coding system, 30% were able to provide a spontaneous correct answer and complete interpretation of the symbols used. When asked to choose from a series of pre-set interpretations, more than 50% of respondents correctly interpreted the green and red symbols, 38% correctly interpreted the yellow symbol.

Level of satisfaction

83% of the respondents thought that the traffic light system was 'certainly a very useful initiative'. On the other hand 7.5% considered the system ineffectual, as they perceived its meaning as unclear.

Perceived utility for a) protecting children b) as an educational modality

91.5% of respondents stated that they interpreted the symbols as aimed at families and at parents with young children.

Perceived appropriateness for the range of proposed TV programmes, and perceived need to be extended to additional programming such as news, sports, advertisements

82% of respondents thought that other networks should also introduce the colour-coding system, as an intelligent and effective tool to safeguard children and assist parents in choosing films for their children.

Level of need for and nature of additional accompanying measures

Some viewers asked for more detailed information to be provided by the broadcaster, and some asked for audience training in respect of the meaning of the symbols used.

2.4 United Kingdom

In the UK awareness and impact of the watershed has been monitored in the UK since

1975. A recent unpublished report by the ITC reveals valuable conclusions, drawn from a survey about the efficiency of the watershed.[5]

Level of awareness amongst parents

The report suggests that up until the mid-1980s, overall awareness of a fixed watershed time remained at around 60% of adults. In the mid-1980s, the levels climbed sharply and have remained stable at around 90%. This increase coincided with a major publicity campaign mounted by the ITC and the BBC in 1986. It seems that that the principle of the watershed is now firmly established and widely understood – both by parents and other adults. In a recent survey by the Broadcasting Standards Commission its timing was placed correctly at 9.00pm by 79% of the respondents.

Compared with overall awareness of watershed times for terrestrial channels, the figures for cable and satellite are low, although they have improved markedly over the years since 1990. In 1991, 34% of viewers were aware of the existence of a Family Viewing Policy for cable and satellite channels; in 1997 this figure had risen to 55%. However, it is clear from research that there exists a high level of confusion with the longer-established terrestrial watershed time of 9.00pm. Unlike terrestrial channels, film channels and adult channels are subject to somewhat different scheduling restrictions. For films, those with a "15" certificate cannot be shown prior to 8.00pm., while "18"-rated films can only be screened after 10.00pm. "Adult" channels can only show explicit material after 10.00pm, and generally targeted cable and satellite channels have a 9.00pm. Watershed.

(NB Cable and satellite subscribers have a 'technological' advantage in terms of control, since they have access to channel blocking or filtering, either through PIN numbers to prevent access to specified channels, or through removal of the satellite receiver smart card. Despite this fact, however, only 37% of parents with multi-channel access in 1997 knew that such facilities were available to them. And only one

[5] Independent Television Commission, *Overview of 27 years of Annual Surveys* (London: ITC. Unpublished Report, 1998).

in ten of these said they had in fact used them to prevent children's access to programmes or channels.)[6]

Level of satisfaction

For the majority of viewers, the degree of regulation of television channels is felt to be at about the right level; possibly verging on too little rather than too much. This overall balance of opinion has been found regularly since 1989 for the main terrestrial channels. Very similar views have been documented for satellite and cable viewers about non-terrestrial channels since 1991.

Perceived utility for a) protecting children b) as an educational modality

In the UK, parents say generally that the time of day is a useful guide to them for a programme's suitability for their children; a large majority of parents (72%) feel that transmission time is an indication of a programme's content.[7]

Impact on the viewing policy of the family

Parental responsibility for children's viewing is considered vital and parents in particular are clear that they have to play their part in monitoring children's viewing, especially after the Watershed. Nearly six in ten (56%) of all respondents had watched television recently with children and nearly half of these (43%) had occasion to switch off/over. A recent Gallup Poll commissioned by Pace Micro Technology has also revealed that 75% of parents censor their children's viewing.[8]

Level of viewer (parents and children) understanding of the warnings provided by the system

The 9.00pm Watershed is a well-recognised and understood principle and many children accept it is there to protect them. The participants were also questioned on information about programme content, on-air pre-transmission warnings. These were

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[6] Broadcasting Standards Commission, *Regulating for Changing Values: A Report for the Broadcasting Standards Commission* (London: British Standards Commission, 1997).
[7] Broadcasting Standards Council, *The Scheduling Game*, ed. Andrea Millwood Hargrave (London: Broadcasting Standards Council,. 1995).
[8] Pace Micro Technology plc, *Pace Report 1998* (Unpublished Report, 1998).

deemed the most useful by 37% of poll respondents; well ahead of on-screen symbols (19%).

Level of need for and nature of accompanying additional measures

The Gallup Poll mentioned earlier has revealed that nearly half of children (47%) go to bed after 9.00pm during half term and other school holidays. The same poll shows that 47% of parents interviewed want broadcasters to extend the current 9.00pm watershed to protect children from exposure to unsuitable television programmes. Of this group 72% would like a 10.00pm watershed with the majority of the remainder (23%) wanting the present watershed to be moved to 11.00pm. In last year's Pace report, 60% of parents stated that the watershed should continue to apply to digital channels with only 20% feeling that it would not be required.

2.5 United States

A survey among adults in Georgia, conducted by Wurtzel and Surlin[9] in 1978, found that almost all respondents recalled having seen advisories on television. However, only 24% said that they had had an impact on their viewing. Of the respondents familiar with the advisories, 39% reported that they had resulted in their not watching the programme and 24% said they actually prompted them to watch the programme with greater interest. Of the respondents with children, 54% stated that the advisories had influenced their decisions about their child's viewing, with the overwhelming majority (81%) not letting their child watch the programme as a result.

In 1973, a nation-wide *TV Guide* survey reported that 53% of those questioned were in agreement with a rating system for television programming, and by 1993 an USA *Weekend* reader survey reported that 73% of their readership would be in favour of this initiative.[10]

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[9] Wurtzel, A., and Surlin, S., "Viewer Attitudes Towards Television Advisory Warnings," *Journal of Broadcasting,* 22, p 19-31, (1978).
[10] Joel Federman, "Film and Television Ratings: An International Assessment," Unpublished Report (Studio City, CA: Mediascope, 1993).

A more recent unpublished study by Hamilton looked at the Nielsen ratings for prime time films on network television between 1987 and 1993.[11] He noticed a significant drop among viewers in the 2-11 age band, whereas the advisories did not have a significant impact on the teenage or adult group. This suggests that advisories can fulfil the purpose of protecting minors; the study does, however, not permit us to draw any conclusions as to whether the warnings resulted in parental interference or whether the minors decided not to watch the programmes themselves.

A major issue regarding ratings and advisories has been whether they have their desired effect, namely the protection of viewers, and in particular minors, from harmful content, or whether they actually achieve the opposite by making the content seem more attractive and interesting, especially to children. Although it is commonly agreed that ratings and advisories are directed at adults to inform them about content and to allow them to protect their children, one cannot ignore the question of how children respond to these messages, as children's viewing decisions are often made in the absence of the parent.

An experiment conducted as part of the National Television Violence Study involved 297 children aged 5-14 years, from a variety of schools in Madison, Wisconsin. The children were given programme guides and asked to choose from a variety of films. One group was given a guide with accompanying ratings, the other was given a guide listing the same films without ratings. The experiment concluded that ratings and advisories can have a significant impact on children's viewing. This impact depends on a number of factors, including aspects of the advisory or rating and characteristics of the child. The well-known advisory "parental discretion advised" had a strong and positive impact on boys' interest in viewing reality-action programmes, with the strongest effect for the boys aged 10-14. The same advisory had no impact on girls' tendency to choose such a programme. In contrast, another frequently used advisory, "viewer discretion advised", did not increase boys' interest in viewing police-detective shows, but it decreased the number of choices of such programmes for girls, and

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[11] James Hamilton, "Marketing Violence: the Impact of Labelling Violent Television Content," Paper presented at the International Conference on Violence in the Media (New York: St John's University, 1994).

especially for the younger ones. The Motion Picture Association of America (**MPAA**) ratings, "G", "PG", "PG-13" and "R", also strongly affected children's desire to see a film. Older boys were especially interested in a film when it was rated "PG-13" or "R" and completely avoided it when it was rated "G". Younger girls, on the other hand, were most interested in the film when it was rated "G". For older girls and younger boys, interest in the film peaked when it was rated "PG-13". All of these findings suggest that ratings and advisories are important factors in children's choice of programmes, but do not necessarily influence their choice positively.

Also worthy of mention is that half of the children's comments about rated films implied their appeal; for example, some children said "the cooler the movie the higher the rating". The study also found that children whose parents set limits and were more involved in their television viewing were less likely then other children to choose programmes with parental advisories and films with more restrictive ratings. These findings suggest that parental involvement may become internalised and have beneficial effects when the child selects programming without adult supervision.

In October 1997, the television industry in the US began implementing a new system for rating all programmes other than news and sports shown on broadcast and cable. The rating system, designed to work in conjunction with the V-chip device, provides for both age-based ratings and content descriptors (V for violence, S for sexual behaviour, D for sexual dialogue, L for adult language, and FV for fantasy violence in children's programmes). One year into the launch of the new system, the Kaiser Foundation conducted a study to explore how it had been applied during its first year of operation.

Overall, the study found that the television industry had done a good job in complying with the new policy; across all networks and programmes reviewed, only 4% of programmes that qualified for a rating failed to receive one. The findings also suggest that the age-based ratings were applied accurately to general audience shows. However, the study found that the rating system does not flag most sex and violence for parents, but most who use it assume it does.

A companion survey of more than 500 parents found that two-thirds of those who use the ratings say the content descriptors provide the most useful information (13% say the age-based ratings do). In fact, however, content descriptors are not being used on the vast majority of general audience shows containing sex, violence or adult language. Of all the programmes with an age-based rating, only 23% received a content descriptor; 65% received an age-based rating only and 7% were MPAA rated. More than three out of four programmes with violent content and nine out of ten with sexual content do not receive the appropriate V or S content descriptors. Yet, the majority (55%) of those who use the TV ratings believe that the V content descriptor is supposed to be used on all programmes containing violence. As a result, parents who wish to use the ratings to prevent their children from viewing content of this nature may not be aware that there is still a significant amount of 'moderately intense' sex, violence and adult language in programmes without content descriptors. In the words of Vicky Rideout, Director of the Kaiser Family Foundation's *Program on the Entertainment Media and Public Health*, "The bottom line for parents who want to use the V-chip is clear. Parents cannot rely on the content descriptors, as currently employed to identify most shows containing sex, violence, or adult language."[12]

2.6 Conclusions

Studies addressing the social efficiency of ratings and advisories have produced very mixed results. On the one hand their findings suggest that visual symbols and verbal warnings have their desired effect, namely the protection of the viewer, especially children, from potentially harmful content. On the other hand, despite fairly high levels of awareness and satisfaction, it is clear that there is a list of shortcomings - confusion about the meaning of symbols, misinterpretation and sometimes even a counterproductive effect. The latter, in particular, which has been demonstrated quite clearly by the results of the National Television Violence Study, and to some extent by other studies, is a cause of great concern. Boys approaching adolescence and juvenile males have a particular tendency to be tempted by high ratings; and yet it is specifically

[12] "Major New Study of the V-Chip TV Rating System: TV Rating System Doesn't Flag Most Sex and Violence for Parents, But Most Who Use it Assume it Does," Press release for Rating the TV Ratings:

this group that plays a substantial part in the occurrence of violence in the United States. Ratings and advisories can play an important part in protecting the viewer, but one cannot deny their "side effects" – they are a strong influence on the choice of children's and young people's viewing, and this influence is not always positive. It seems that their role should be more that of a complementary tool; this suggestion has been made by parents in particular and has emerged from various studies. Furthermore, as the study by the Kaiser Family Foundation reports, the majority of parents prefer content descriptors; these can, however, only fulfil their purpose if applied across the whole spectrum of programmes by the broadcasters

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One Year Out: An Assessment of the Television Industry's Use of V-Chip Ratings, The Henry J. Kaiser Family Foundation, 1998.

3. Media Education and Literacy

As we have seen from the economic analysis, regulation, by providing information through rating and labelling systems, is a means of facilitating parental control and choice. It compensates for market failure by assuring that information is made available. However, it immediately becomes clear from the social efficiency analysis that other forms of providing information can complement rating and labelling systems, and are sometimes necessary to make rating and labelling systems effective. Ultimately, the goal is to enhance the power of the parent by making that parent informed (and able to act on that information). For this reason, the substantial experience of the Member States in encouraging media literacy among both young people and families is an essential adjunct to any discussion of ratings and labelling systems. Furthermore, information about programmes—the essence of rating and labelling systems—is inadequate unless the public is advised of the existence of these systems and educated in their use. The enhancement of children's media literacy and critical viewing skills is a necessary component of any broad approach to avoiding harm from adverse television viewing. Our study of comparative practices suggests that media literacy does not have a high priority, even though the research literature on harmful effects from the media emphasises the significance of media education in developing healthier viewing habits.

Though many studies argue that the proliferation of violence depictions on television is in itself harmful, most researchers will acknowledge, to a greater or lesser extent, that other factors influence the degree of harmfulness produced. This seems to be particularly true of research conducted in European countries, which has focused more on audience perceptions of violence in order to determine whether the context in which violence is shown has a bearing on its harmfulness. Such studies have found that both adults and children are capable of making varied and complex judgements about violent content, despite a widespread belief that the young are much less able to comprehend the context in which violence is shown, and are therefore more

susceptible to harm.[13] Various factors have been found to affect the audience's response to violent images. These include the degree to which viewers can identify with characters and with the setting in which violence is depicted; the extent to which they understand what is happening within a scene or what the likely outcome is to be; the viewers' perception of the victim's innocence; and the level of detail and/or disturbing effects used in a violent scene. Media literacy approaches need to take these factors into account.

The more we know about the context of viewing and the consequences of various viewing styles, the better a job can be done in terms of the development of media literacy skills. For example, the distinguishing of factual from fictional material is a skill that can be taught in primary schools from as early as the age of seven. In order to foster deliberate, informed selection practices, a comprehensive, well-defined media literacy campaign should supplement the establishment and use of technical blocking devices, engaging parents and children in all aspects of media literacy including reading and writing; speaking and listening; accessing new technologies; critical viewing; and the ability to create personal media content, using a wide range of technologies, including cameras, camcorders, and computers.[14] Finally, a greater understanding of the relationship between children and the media should also result in the improvement and augmentation of programming for young people.

3.1 Media Literacy: general framework and recommendations

In most circles, even academic ones, media literacy is an amorphous concept. The ambiguity as to just what is media literacy implicates how and to whom it is taught[15]. In recent years it has come to include the ability to analyse competently and to utilise skilfully print journalism, cinematic productions, radio and television programming, and even computer-mediated information and exchange. This study therefore defines

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[13] Research on the relationship between children and media violence is discussed in the Annex (Annex 1, Chapter 2).

[14] Renee Hobbs, "Democracy At Risk: Building Citizenship Skills Citizenship Skills through Media Education." (http://interact.uoregon.edu/MediaLit/FA/mlhobbs/democracy.html)

[15] See for instance Dyson (R.A.), Media Literacy: Who Needs it and What Does it Mean? In; Gazette, Volume 60 Issue 2, April 1998, pp 155-166

media literacy - as "the ability to access, analyse, evaluate and produce communication in a variety of forms".[16]

A media literacy campaign can not only facilitate informed, positive television viewing, it can assist in the development of citizenship skills, promoting the development of information literacy skills, offering access to diverse sources of information, and providing opportunities to practise leadership and responsible self-expression.[17] A media literacy campaign should involve broadcasters, community and non-profit organisations, families, educational institutions and the government body responsible for education.[18] The roles of those stakeholders in media education and literacy are described below. It is important to emphasise the need for partnerships in order to stimulate a positive, long-running campaign.

Broadcasters

We recommend that, as part of a self-regulatory process, the broadcasters agree to the development of a continuous on-screen effort to create general awareness of ratings and parental control mechanisms. Such a campaign would differ from Member State to Member State, but the prospects of cultivating an affirmatively-selected television environment for children presents strong structural inducements to the producers and broadcasters to both provide detailed and sophisticated information about and, simultaneously, greater access to their content by third-party rating providers. In such a positive environment, programming would be white-listed or selected by households as within the range of programming to be available to their children. This approach to children is a dramatic and desirable departure from the "channel-hopping" mode of viewing television. Children's viewing habits, whether determined by their parents or caretakers, or self-directed by the child, should be specific in purpose and temporally delimited. Thus, as has happened in the on-line environment, information about and

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[16] Aufderheide, 1992.
[17] Ibid.
[18] Media literacy clearinghouses such as the Media Literacy Online Project. (http://interact.uoregon.edu/MediaLit/HomePage), The Media and Communication Studies Site (http://www.aber.ac.uk/~dgc/mcs.html), Canadian Association of Media Education Organisations (CAMEO) (http://interact.uoregon.edu/MediaLit/CAMEO/index.html) and The Center for Media Literacy (http://www.medialit.org) are available on the World Wide Web for the development of comprehensive media education strategies for families, schools, community organisations, and broadcasters.

evaluation of television content would attain a high value. Just as browsers are the portals through which Internet users obtain information, EPGs and related programming menus from a multiplicity of rating providers would provide the means by which parents could positively select programming for their children to view. Initial steps in this direction have been taken by the U.S. television industry, with the development of Web sites such as "The TV Parental Guidelines",[19] which provides a detailed description and explanation of their television ratings system for the benefit of parents, and as a resource for broadcasters. Within the UK Film Education is an interesting example of industry led education. It is a registered charity funded by the UK film industry,[20] whose aim is to encourage and promote the use of Film and Cinema within the National Curriculum. This states that teachers should give pupils the opportunity to analyse and evaluate a wide range of Media, including film. Study resources include film specific study guides, generic study guides, BBC Learning Zone programmes, study videos, CD-ROMs and educational Internet pages, plus an information booklet for cinema managers working with schools. We recommend to develop a similar system for broadcasting and in particular for parental control mechanism.

Community/Non-profit Organisations

In order for families to effectively utilise industry "white-list" mechanisms, increased participation by community and non-profit organisations can assist in informing parents about means of parental control. Parents can work with groups such as religious organisations, schools, ethnic and cultural bodies, parents' associations, teachers' unions, and youth organisations, which have a stake in building and reinforcing loyalties and which perceive assisting members in shaping identities to be part of their activities. Programming information and evaluation could be sought and selected according to the credibility of the information provider or third-party rating provider as perceived by the particular group. Whether any given menu is ultimately palatable or credible in the eyes of the individual family is a function of whether what ultimately appears on the television comports with that family's conception of what is desirable and appropriate. Those who use the Internet browsers select their browsers

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[19] The TV Parental Guide. WWW page: <http://www.tvguidelines.org>.
[20] UK Film Education. WWW page: <http://www.filmeducation.org>.

based on the quality, breadth and reliability of the web pages that are retrieved. In a similar manner, programme content/ratings guides can be developed to provide parents with a proactive mechanism for deliberative television viewing. Using models provided by associations such as "Screen It! Entertainment Reviews for Parents",[21] organisations can develop detailed programme/ratings guides to inform parents fully about television content.[22] This information can be made available both online and in print form, and designed to complement industry-developed on-screen programme guides.

Parental Initiatives

Parent and family involvement is a significant component of effective, long-lasting media education. Understanding the different rating systems and devices that apply to media is also an important step in becoming a better-informed parent. Media literacy strategies for parents should begin with a focus on more parental involvement in children's media habits: the location of computers and electronic media in central places in the home (living room, study, etc.), discussion of programming, monitoring, and intentional television viewing (including the maintenance of viewing diaries/logs). Descriptive rating systems can assist parents in undertaking this educational process. The encouragement of family-focused media education will require resources for a determined, long-running campaign. To implement this partnerships with other agencies will be vital.

Supplemented by public service campaigns, announcements, materials from non-profit organisations, guides for parents on viewing television with children, and strategies for parents to use media as a catalyst for educational opportunities, parents can create a culture of informed, responsible television viewing in their homes. In the online guide "Taking Charge of Your TV. A Guide to Critical Viewing for Parents and Children", Renee Hobbs advises parents to become more aware of TV programme production methods and techniques; establish limits on how much TV the family watches each

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[21] Screen It! Entertainment Reviews for Parents. WWW page: <http://www.screenit.com>.
[22] The Movie Mom's Guide to Family Movies and Videos. WWW page: <http://pages.prodigy.com/moviemom/moviemom.html)>.

week; develop family guidelines for programme selection; and "Talk back to the TV", by expressing opinions of what is seen and heard.[23]

Parent education strategies such as "The Television Project Workshops"[24] can provide parents with both specific activities and strategies to assist them in developing television viewing policies for their families and facilitate the use of programme/content guides developed by broadcasters and independent non-profit organisations.

Educational Institutions

For myriad reasons, the time that the family as a single unit watched programming together has declined and this process will become accentuated in a multi-channel, multi-set digital era. We recognise the need to empower parental control of television viewing when parents cannot be with their children, or are unable to directly monitor programme consumption. School-based media literacy initiatives can directly support and supplement efforts in the home and community, fostering the development of youth as informed, responsible television viewers. However, several observers and projects around the world have also underscored the need to train teachers for media education. Teachers must have administrative support to study media phenomena and the resources of literature and support materials. The latter can be initiated by the relevant Government Authorities in the respective countries.

Research indicates that Great Britain, Canada, Australia, Scotland, Germany and other nations include media literacy as part of the language arts programme in primary and secondary schools. While the practice is not so widespread in the United States, North Carolina, Massachusetts, New Mexico and Texas are among those that include media literacy in their curriculum frameworks. Current US efforts employ models provided by British scholars, including Len Masterman, David Buckingham, David Lusted and Cary Bazalgette. Difficulties have arisen in school-based media literacy initiatives, including teachers' use of media texts, etc. for non-educational purposes such as

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[23] Renee Hobbs, "Taking Charge of Your TV: A Guide to Critical Viewing for Parents and Children. (http://www.cyfc.umn.edu/Documents/C/C/CC1024.html).
[24] The Television Project Workshops. WWW page: <http://www.tvp.org/tvpwork.html>.

rewards for good behaviour, to keep students quiet, for passive viewing (without discussion, reflection), and as a "filler" to free up time for other tasks.[25] In addition, media analysis in schools has often been a teacher-centred practice, viewed as a process of "demystification" of media for youth, which often disregards students' prior knowledge and assumes their passivity as an audience.[26] Media production work is often relegated to vocational education, an esteem-building exercise for "at-risk" students only or purely for entertainment purposes. To fully realise the educational benefits of media literacy (the development of literacy and critical thinking skills), well-developed media literacy curricula should be implemented with proper institutional support and comprehensive teacher training. Classroom practices, particularly the nature of student-teacher dialogue, must be re-examined. A school-based media literacy initiative should be an academic discipline, employing both media analysis and practical work to facilitate the development of youth as informed, active viewers. Curriculum examples are available free-of-charge or at low costs, from organisations such as YTV Canada, Inc.,[27] the Just Think Foundation,[28] which provides a professional development model for educators among its services, and Creating Critical Viewers, a partnership between educators and broadcast professionals that produced this online handbook[29].

Worthwhile mentioning at European level is the European Association for Audio-visual Media Education[30] (AEEMA/EAAME) that was founded in 1989 under the joint auspices of the European Commission and the Council of Europe. It benefits from the recognition of Eureka Audiovisuel and regularly liaises with the European Parliament on matters concerning Media, education, culture and young people. Its purpose is to develop the identity of audio-visual Media Education and to foster the idea of an audio-visual culture amongst the public at large. AEEMA/EAAME has nearly 300 members who represent the key protagonists in a wide variety of national scenarios. It

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[25] Renee Hobbs, The Uses (and Misuses) of Mass Media Resources in Secondary Schools. WWW page: <http://interact.uoregon.edu/MediaLit/FA/mlhobbs/uses.html>.
[26] David Buckingham, "Watching Media Learning: Making Sense of Media Education," The Falmer Press, England: 1990.
[27] Television and Violence Lesson Plan. WWW page: <http://ietn.snunit.k12.il/violence.htm>.
[28] Just Think Foundation. WWW page: <http://www.justthink.org>.
[29] http://www.cyfc.umn.edu/Documents/C/C/CC1026.html
[30] European Association for Audio-visual Media Education. WWW page: <http://www.datanet.be/aeema/aeema.htm>.

aims inter alia (i) to promote the teaching of the languages of image and sound; (ii) to convince young people, the public at large, the authorities both local and national as well as the professionals that such education is necessary; (iii) to prepare young people to the use of new means of communication; (iv) to encourage a critical approach to audiovisual media by practical exercises; (v) to establish a permanent inventory of audiovisual education in Europe and (vi) to exchange information on the methods used in training and in the audiovisual creation in Europe.

Curriculum development is in most Member States the responsibility of the Department of Education[31]. It is then also clear that in order to develop a successful parental control environment they should be involved in the creation of a supportive education system. At European level, DGXXII is responsible for education, training and youth. The Maastricht treaty's articles 126 and 127 respectively specify that the European Community "shall contribute to the development of quality education by encouraging cooperation between the Member States and, if necessary, by supporting and supplementing their action ..." and "implement a vocational training policy which shall support and supplement the action of the Member States...". In both cases, the Member States maintain full responsibility for the "content and organization" of their national education and training systems. DG XXII has developed three five-year programmes: SOCRATES for education, LEONARDO DA VINCI for training and Youth for Europe, a new programme for young people outside formal education and training systems. We recommend stimulating the use of these programmes for the further development of media education in Europe.

3.2 Comparative Country Analysis

Austria

Since 1973, all primary and secondary schools in Austria have been required to integrate media education across the curriculum. In theory, every teacher addresses the basic principles of media education in every subject. In practice, this means that the teaching of media education depends upon the personal commitment of individual teachers.

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[31] A complete overview can be found at http://www.eurydice.org/

Denmark

A group of committed teachers introduced media education in Denmark in the 1930s. While the 1950 Education Act ignored their initiative, the 1961 official education handbook devoted a whole chapter to screen education. The subject was offered as an optional course for older students, and focused on film as an art rather than as a medium. When the Danish curriculum underwent a major revision in 1969, media education lost its designation as a separate subject. Since the mid-1970s, the National Media Research Association has encouraged the integration of media education across the curriculum. And, while many teachers of history, social studies, and Danish feel media education to be an important part of their subject, some teachers complain that such teaching interferes with their own course material. Research has shown that Danish students prefer courses in production to courses in analysis and critical awareness.

Currently it is suggested that students "might" or "ought to" be taught media education as part of other courses. There are a number of dedicated teachers who are doing just that, with both critical analysis and production.

England

In the 1970s, the sociologists and the semiologists put their marks on British media education. The sociologists concentrated on the media as a collaborative industrial form, and encouraged its study from such viewpoints as that of ownership and control, audience, and the ideological role of the media. They gave more attention to what made the media what it was, rather than to media texts themselves.

Media education in Britain evolved in the 1980s with Len Masterman's work. His approach is essentially interrogative and has the benefit of being informed by critical mass communication research. His questions are based on the assumptions that the mass media construct their own realities. These questions cluster around four general areas:

(1) the sources, origins and determinants of media constructions. Who constructs

media reality?
(2) the dominant techniques and codings employed by the media to convince us of the truth of their representations. How is this process of representation carried out and achieved?
(3) the nature of the 'reality' constructed by the media and the values implicit in media representations. What are the characteristics of the world so represented?
(4) the ways in which media constructions are read or received by their audiences. How are these representations read and understood by the people who receive them?

The current situation in England is as follows:
For primary students, the English national curriculum currently requires a minimal element of media literacy within the reading attainment target for English, which can be taught by using print texts only. Secondary students have been offered courses in media literacy since the early '60s. At present there are courses available - Film and Media Studies, Media Studies, and Media Studies Advanced - in both the GCE (General Certificate of Education) and the GCSE (General Certificate of Secondary Education). Teacher training programmes are available in many colleges throughout England, such as the University of London and the University of Southampton.

One institution has been central to the development of media education in Britain, the British Film Institute (**BFI**). This organisation receives government funding to foster public appreciation and the study of film and television. The BFI's operations include the National Film Archive, the National Film Theatre, and the Museum of the Moving Image. Its London offices house large libraries of books, periodicals, photographs, and publicity materials, and a database on film and television.

The Education Department of the BFI works with people in education and training to develop knowledge, ideas, and ways of teaching about film and television. This work includes research, teaching and advising, publishing teaching materials, and organising courses and conferences.

Finland In the curriculum of Finnish schools, media education is described as a

"pervasive" subject. This means that while mass media education has no course of its own, it is taught at certain points in the following subjects - Finnish, art, history, social studies, and study of the environment.

There have been two significant projects in Finnish media education. In the first, organised during the mid-1970s by the National Board of General Education in co-operation with the Finnish Newspaper Publishers' Association, students received - for a period of one week - teaching about newspapers and mass media. The second, the Mass Media Entertainment Project, took place during the 1978/79 and 1979/80 school years. This National Board project focused on different forms of mass media entertainment, and getting teachers and students to discuss their use. The Board provided material aimed at developing students' critical viewing skills. Both the Association of Film Clubs and the Finnish Broadcasting Company also produced materials, which have continued to prove useful. The National Board has indicated that it considers media education an important subject, yet there are few textbooks in the area and there is no adequate training for teachers. Moreover, many educators feel the subject would work best as a separate course.

France Media education - especially in the area of film study - has had a long history in France, though generally not as part of the formal system of education. Traditionally it has been an extracurricular activity carried on by film societies, school clubs, and youth activity groups. By the late 1970s there were literally hundreds of thousands of these film societies (Cine-Clubs) organised into federations.

One of the first initiatives in teaching media within the school curriculum began in the mid-1960s and continues today. Known as "*Langage Total*", it was developed at the *Institut du Langage Total* in Lyons under the direction of Brother Antoine Vallet in conjunction with the Catholic University of Lyons and the Catholic University of the West at Angers. Programmes are taught in over 200 French primary schools and more than 100 secondary schools. The *Langage Total* method is also used in other European countries, the Near East, Latin America, and French-speaking Africa.

On the initiative of a research/action team from the *Centre Régional de Documentation Pédagogique* (**CRDP**) in Bordeaux, René La Borderie directed the development of the project known originally as Introduction to Audiovisual Culture (**ICAV**) and now called Introduction to Communication and the Media (**ICOM**).

As ICAV, the project introduced to schools an integrated approach to the study of image forms transmitted through advertising, newspapers, and educational publications. Until 1982, education authorities recognised the project only as a provisional programme allowed into schools attached to the Ministry of National Education (primary and secondary schools). In 1982 there was a new definition of the Introduction to Communication and the Media project, formulated and adopted at a national meeting. Within this new definition, ICOM wants education to cover all media and all situations involving communications. In 1979 the various government ministries involved in educational activities for young people - the Ministries of Agriculture, Education, the Family, Leisure, Youth and Sport - conducted a joint nation-wide experiment in educating young television viewers. *Le Jeune Téléspectateur Actif* (**JTA**)[32] lasted until 1983. The project urged all who played a role in education - parents, teachers, youth club organisers, etc. - to integrate into their educational activities a consideration of the part played by television in the daily lives of the young. After two years, JTA evaluated the changes that had taken place in the relationships between children and television. As was expected, the amount of knowledge acquired about television had increased. Furthermore, the young showed a change in their capacity for observation. They were paying more attention to the form of the messages, to the modes of representation and the prevailing meaning. They were also seen to have developed research attitudes towards the kinds of programmes watched. At the end of the experiment in 1983, a number of training courses in critical viewing skills were incorporated into in-service and training for teachers at various levels. It is also important to note that the new official curriculum published by the Ministry for secondary schools makes some important statements about media education.

[32] Young Active Television Viewers.

The *Centre de Liaison de l'Enseignement et des Moyens d'Information* (**CLEMI**) was established in 1982 by the French Ministry of Education to help students develop critical thinking skills and to train them in the responsibilities of modern citizenship. CLEMI organises national and regional teacher training courses, publishes professional journals for teachers and makes available its documentary resources on contemporary media education.

Germany There are records to indicate that German schools introduced media education at the time when the first newspapers were published in the 17th century. Scholars attribute the first mention of media education to Johann Amos Comenius (1592-1670) in *Schola Pansphica.* Comenius held that the study of newspapers "would benefit the development of language skills, and provide basic information for current affairs and geography." His educational philosophy insisted on a relevant curriculum - students must learn about the world around them.

By the late 1960s, German educators acknowledged that the media were not only educational tools, but also worthy of study for their content. Gradually media education made its way into the curriculum: not as a separate subject but as part of other subject disciplines.

Today media education is usually taught in such courses as Political Education, Knowledge About Society, or Social Studies. These courses must be included in the curriculum of each federal region's school system. The function of these courses is to promote awareness of citizenship. A student is to be given an education that will "not only enable him to develop his personality but to take part in social decision making. In such a concept the importance of receiving the correct information about current affairs is likely to be stressed as a precondition for informed action. It is in this role that media teaching often appears to play a part in basic social studies courses."

A 1984 study commissioned by the *Institut Für Publizistik der Universitat Mainz* showed that of the 199 teachers surveyed, 91% had dealt with the mass media in class and 72% dealt with the topic regularly. Surprisingly, however, they placed most emphasis on

analysing newspapers, despite the fact that West German adolescents at that time viewed 72 minutes of television a day on average and spent only 8 minutes a day reading newspapers. Each federal region has its own resource centre to help teachers. The major one is the *National Institut Für Film Und Bild im Wissenschaft und Unterricht* (**FWU**).[33] Along with two journals, *AV Praxis* and *AV Forschung*, FWU has produced a portable case of materials for classroom use. The resource materials include a film cassette with three different commentaries, and the same script filmed from three different perspectives. These are used to demonstrate the constructed nature of media images and messages.

Media education is seen by some German parents as a useful way to protect minors from the "dangerous" influences of the media. Other parents see television as "mere entertainment" and therefore not worth studying in school. And some see any kind of visual literacy as something that belongs to a left wing philosophy.

In 1984 the *Institut Jugend Film Fernsehen* in Munich completed a project for the German Research Institute. For four years the group had been developing a media education curriculum; by 1984 four textbooks had been piloted, revised and published. Unfortunately, funding for the project was stopped. And while the government gave teachers in the federal region of Bavaria permission to use the new curriculum, they provided neither training nor teaching aids.

Ireland Although it is not officially included in the curriculum, a growing number of Irish schools are including some form of media education in their courses. Since the late 1960s the Catholic Communications Centre in Dublin has conducted in-service courses in media for teachers. As a result of these courses - and courses organised by other groups - scores of individual teachers have attempted, with varying degrees of success, to introduce some media education topics into such traditional subjects as English and Religion.

[33] The Institute for Film and Image in Science and Education.

The first publication of the Curriculum and Examination Board, Issues and Structures in Education (1984) made clear that media education would be a basic part of the new curriculum. With the support of the European Economic Community, a training programme was established and media education included within its one-year syllabus. In August 1985, Ireland's first two media textbooks were published with the hope that they would be used to incorporate media education within other subjects.

Italy In 1985, a new curriculum was announced for Italian primary schools. This went into effect in 1987 and was preceded by refresher training for all Italian primary teachers. Media education was included in the area known as Image, Sound, Music and Movement. This area deals with the cultural and social values of non-verbal language and their role in the development of children.

Netherlands As of 1990, Audiovisual Education (as media education is known in the Netherlands) was neither an autonomous nor mandatory subject in the Dutch national curriculum. Audiovisual Education takes place mainly within art education and as a result has a very aesthetic approach. Media are regarded as purposeful constructs whose form is highly significant.

Scotland Growth in media education, especially in the secondary school system of Scotland, was stimulated and shaped by the Media Education Development Project (**MEDP**), which was established by the Scottish Council for Education Technology (**SCET**) in 1983.

1983 was also the year in which the Scottish Education Department began a reassessment of the curriculum in Scottish secondary education. In the midst of all these changes, there were many opportunities to develop courses in media education. The MEDP made use of these.

The curriculum development work of the MEDP differentiated between media education and Media Studies. In media education, components are inserted into existing subjects. Media Studies refers to a series of modules, which are taught as a

separate course. These modules range from a general overview of all media, to eight specialised modules.

The Media Studies modules were written to have either an analytical or practical emphasis. Television, Radio, Press and Magazines, and Graphic Design and Photography were written into the practical domain. Students were asked to produce short television or radio shows, a newspaper, a magazine or advertisement. They were also asked to analyse professionally produced examples of media to help them with their own productions. In the analytical domain, specialised modules were developed in Film, Contemporary Popular Music, Representations and Narrative Forms in Broadcasting. As early as 1984, over 100 institutions were teaching Media Studies using the first five modules to be published.

The MEDP's efforts in the area of teacher training included direct provision of in-service training, planning of locally based courses and involvement in the planning of National and Certificate courses. The Scottish Film Council has worked in conjunction the Association for Media Education in Scotland (**AMES**) to produce many teaching aids and a quarterly journal, The Scottish Media Education Journal.

Spain The Department of Education at the *Universidad Nacional de Educación a Distancia* produces a number of books, audio tapes and videocassettes on media education. A number of North American media education books are available in Spanish.

Sweden The Education Department of *Sveriges Radio* (**SR**) has produced materials for media education in Sweden's secondary schools since the beginning of the 1960s. The courses developed were basically theoretical. While the emphasis has been on film study, some television has been included. The official policy is that media education should be taught so that students will have "...the ability to watch critically and make an independent judgement of the messages received from the different media, and the ability to talk about how one has experienced films and TV programmes". This was made compulsory in 1980.

Glossary of acronyms

A.G.E.	**Associazione Genitori**
ANICA	Associazione Nazionale Industrie Cinematografiche Audiovisive e Multimediali
API	Application Programme Interface
ASAI	Advertising Standards Authority of Ireland
ATSC	Advanced Television Systems Committee
ATR	Agrupación de Telespectadores y Radioyentes
AUC	Asociación Usuarios de Comunicación
AUI	Asociación de Usuarios de Internet
AVP	Audiovisual Platform
BACC	Broadcast Advertising Clearing Centre
BBFC	British Board of Film Classification
BPjS	Bundesprüfstelle für jugendgefährdende Schriften
BSC	Broadcasting Standards Commission (formerly the Broadcasting Standards Council)
CCE	Comissão de Classificação de Espectáculos
CCE	Comissão de Classificação de Espectáculos
CCPC	Comisión de Calificación de Películas Cinematográficas
CEACCU	Confederación Española de Asociaciones de Amas de Casa, consumidores y Usuarios
CICF	Commission intercommunautaire de contrôle des films
CNC	Centre National de la Cinématographie
CNP	Conseil national des programmes
CNU	Consiglio Nazionale degli Utenti

CRI	Divisie Centrale Recherche Informatie
CSA	Conseil supérieur de l'audiovisuel
DAVIC	Digital Audio-Visual Council
CvdM	Commissariaat voor de Media
DPR	Decreto Presidente della Repubblica
DR	Danmarks Radio
DTI	Department of Trade and Industry
DVB	Digital Video Broadcasting
EACEM	European Asociation of Consumer Electronics Manufacturers
EBU	European Broadcasting Union
ECHR	European Court of Human Rights
ECJ	European Court of Justice
EFTA	European Free Trade Association
EPG	Eletronic Programme Guide
ETS	Enhances Teletext Specification
FSF	Freiwillige Selbstkontrolle Fernsehen
FSK	Freiwillige Selbstkontrolle der Filmwirtschaft
FSM	Freiwillige Selbstkontrolle Multimedia Dienstanbieter e.V.
GEIE	Groupement Européen d'Interêt Economique
GjSM	Gesetz für die Verbreitung jugendgefährdender Schriften und Medieninhalte
ICAA	Instituto de Cinematografia y Artes Audiovisuales
IDL	Independent Data Lines
INCORE	Internet Content Rating for Europe

IRD	Integrated Receiver Coder
IRTC	Independent Radio and Television Commission
ISPA	Internet Service Providers Association
ISPA	Internet Service Providers Austria
ITC	Independent Television Commission
IuKDG	Informations- und Kommunikationsdienstegesetz
IWF	Internet Watch Foundation
IWGCR	International Working Group on Content Rating
JÖSCHG	Fesetz zum Schutz der Jugend in der Öffentlichkeit
MCCY	Media Council for Children and Young People
MPAA	Motion Picture Association of America
NFC	Nederlandse Federatie Cinematografie
NFK	Nederlandse Filmkeuring
NICAM	Nederlandse Instituut Classificatie Audiovisule Media
NLIP	Nederlandse Vereniging van Internet Providers
NORDICOM	Nordic Information Centre for Media and Communication Research
NOS	Nederlandse Omreopstichting
NTC	National Telecommunications Commission
NVDO	Nederlandse Video Detaillisten Organisatie
NVGD	Nederlandse Vereniging Grammafoonplaten Detailhandelaren
NVPI	Nederlandse Vereniging van Producenten en Importeurs van beeld- en geluidsdragers
ORF	Österreichischer Rundfunk
PDC	Programme Delivery Control

PICS	Platform for Internet Content Selection
RAI	Radiotelevisione Italiana
RSACi	Recreational Software Advisory Council
RTE	Radio Telefís Éireann
RvtV	Raad van Toezicht Videovoorlichting
SCA	Secretariado do Cinema e do Audivisual
SRC	Stichting Reclame Code
TIVEKE	TIetoVErkkojen Kehittämishanke
TUPS	Testo Unico di Pubblica Sicurezza
UK	United Kingdom
UN	United Nations
TVI	Televisisão Independente
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USK	Unterhaltungssoftware Selbstkontrolle
US	United States
VBI	Vertical Blanking Interval
VESTRA	Vereniging voor Satelliet, Televisie, radio programma Aanbieders
VSC	Video Standards Council
VUD	Verband der Unterhaltungssoftware Deutschland e.V.
WOF	Wet op Filmvertoningen
WSS	Wide Screen Signalling
YLE	Yleisradio

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